Riverside City College
Faculty Prioritization Worksheet

Academic Discipline or Department Computer Information Systems

Faculty Requested (Number and specific discipline emphasis if appropriate) 1 Faculty Member Requested-CIS-Cybersecurity Emphasis

Use the Pivot Table Slicers to select a specific college, department, or discipline. Clear the filters (filter icon on top right of slicer) to see all options.

XCSS_LOCATION
RIV
MOV
NOR
(blank)

XCSS_DEPT_DESC
Business Admin/Info ...
Applied Technology
Art
Arts, Hum, & World L...
Behavioral Sciences

XCSS_SUBJECT
APP
BUS
CAT
CIS
CSC

DEFINITIONS

- FTES – Full Time Equivalent Students
- FTEF – Full Time Equivalent Faculty (15 units per semester is full time)
- WSCH – Weekly Student Contact Hour (calculation includes DSCH - Dailty Student Contact Hour -- and Positive Attendance)

Academic Year	FTES	FT FTEF	Overload FTEF	PT FTEF	Lg Lec FTEF	SUM FTEF	FT FTEF /Total FTEF	FT + Overload FTEF /Total	PT FTEF /Total FTEF	FT to PT Ratio*	Total Students (Census)	Waitlist (as of Census)	# Sections	Total WSCH	WSCH /FTEF
2019-2020	467.61	7.99	7.90	13.14		29.02	0.28	0.55	0.45	1.21	3,666	367	163	14,978.81	516.09
2020-2021	534.71	6.93	7.51	13.79		28.23	0.25	0.51	0.49	1.05	4,263	134	175	16,158.85	572.32
2021-2022	523.15	8.63	8.31	14.00		30.94	0.28	0.55	0.45	1.21	4,007	166	169	15,781.63	509.99
2022-2023	611.69	6.27	7.87	19.91		34.04	0.18	0.42	0.58	0.71	4,960	305	195	18,407.51	540.69
2023-2024	664.61	9.58	8.58	20.95		39.11	0.24	0.46	0.54	0.87	5,293	480	208	20,007.56	511.56
Grand Total	**2,801.77**	**39.40**	**40.18**	**81.78**		**161.36**	**0.24**	**0.49**	**0.51**	**0.97**	**22,189**	**1,452**	**910**	**85,334.36**	**528.85**

Data from EMD Current as of August 30, 2024
****FT Includes Overload and Large Load***

Using the ratio of full-time to part-time faculty (Full Time to Part Time Ratio in Column K), please show how the FTEF metrics demonstrate a need for an increase in full-time faculty. The higher the number the more courses taught by FT Faculty. ***See the Guide + Examples tab for more information on this ratio and possible justifications.***

The CIS discipline requests a full-time faculty member for the CIS-Cybersecurity program. Currently, 1 full-time and 1 tenure-track faculty member support Cyber security instruction. As the program headcount has increased, the FT to PT Ratio has declined from 1.21 in 2019-2020 to .97. Twenty-four percent of instruction is taught by full-time faculty. Cyber program classes are increasingly taught by part-time faculty members. According to the RCCD Programs scorecard, headcount in the Cyber programs increased by 60% between the 2022-2023 and 2023-2024 academic years. In addition, Overload FTEF has been increasing. Full-time faculty members are being called upon to teach more overload due to increased enrollment demand and the challenges of hiring qualified part-time faculty willing to teach in-person, hyflex, and hybrid modes of delivery.

Please discuss your waitlist numbers. If you have courses with large waitlists, which CSU General Education requirements do these course fulfill? If you have a large waitlist, it is possible that you can / should offer more sections. Discuss which course / courses have large waitlists and if those courses are required for a specific career or academic pathway.

Due to the variable nature of waitlist numbers reflecting demand, the discipline uses waitlists to a small degree. When waitlists are larger in core, Cyber program courses, the discipline carefully evaluates the programmatic and cost impact of adding sections. Ultimately, we rely on program pathways based on industry advisory input, Cyber faculty outreach, grant activities, and events, industry partnerships, and strong pathway/transfer relationships with Cal State San Bernardino's Cyber security program. Our Cyber pathway courses do fulfill CSU General Education requirements and articulate to major courses at Cal State San Bernardino in the cybersecurity program.

Using the efficiceny metric based on WSCH/FTEF, discuss the discipline efficiency. How has the efficiency changed over the past few years? What is your discipline doing to increase efficiency? Have you changed course delivery methods (online to face-to-face, evening offerings, etc.) to try and improve efficiency? The District WSCH/FTEF goal is 595 (FA CBA Article X.j.10.a). ***See the Guide + Examples tab for more information on WSCH/FTEF.***

The CIS discipline efficiency averaged 530.13 over the last 5 years (note, the average, 528.85 listed (above) is in error). The discipline continually works toward acheiving the the district 595 goal by optimizing class size and streamling course scheduling in flexible modalities. In cooperation with faculty, the discipline regularly adds over the maximum course capacity (ranges from 36-42) in order to achieve capacity at Census in all program courses, in all modalities offered. Our delivery methods are distributed amongst online, hybrid, and hyflex modes and across the college scheduling timeblocks. Our department operations document supports the ideal that program schedules are built on student pathway needs, not personal preferences. Although there is a strong demand for online courses, additional (successful) effort has been made to expand campus hyflex course offerings which provide student flexibility and optimize faculty schedules efficiently to meet program needs.

Please discuss any faculty trends (historical and recent changes) which have helped you identify this need. This could include increased demand which results in a need to offer more classess - growth.

Historically, increased cyber threats and regulations compliance has highlighted the need for cyber security professionals. Within the last 8 years, the CIS discipline has responded to this need by the introduction and expansion of our cybersecurity program. In 2015 we requested a new hire in cybersecurity, which took over a year and a half to fill. In 2022, a retirement in CIS was replaced with second cybersecurity emphasis instructor. Increased student demand for the program, release time due to grant responsibilities (a minimum of .4 for Cyber personnel); department chair .5 (other CIS faculty), lab coordinator .2 (other CIS faculty), and an upcoming retirement in approximately 1.5 years contributes to the urgent need for this position.

Please discuss any specific activities your discipline has participated in with a focus on reducing the student equity gap. This could include serving on the student equity committee, holding office hours in engagement centers, or faculty participating in Champions for Change equity training, attending an equity summit, or attending Center for Urban Excellence training.

The CIS discipline and cybersecurity program have successfully implemented a multifaceted approach to increase outreach and recruitment of underrepresented minorities and women. By developing and disseminating targeted messaging, participating in community events, collaborating with educational institutions, and leveraging the women in cybersecurity club (WiCyS) and the National WiCyS organization, the CIS discipline and cybersecurity program have reached a wider audience and attracted a diverse pool of potential students. Additionally, the CIS discipline and cybersecurity program have provided support and resources to help students succeed in the program, focused on recruiting from underserved populations and non-traditional sources, and encouraged alumni to participate in outreach activities and serve as role models. Efforts have included Professor Berry serving as the Faculty Advising and Student Support Coordinator, serving office hours in the engagement center. labs and the Veterans Center. In addition, speaking engagments at K-12 and summer camps with a focus on building the pipleine into the CIS and Cybersecurity programs that emphasize the importance of diversity, equity and inclusion to particpants. The past 3 years a group of women have been taken to the National WiCyS conference to expose them to succesful role models beyond the instructors in the program. Professor Berry has written and and been awarded nearly 1 million dollars in funding for various cybersecurity efforts and all included specific objective for recruiting and retaining underrepresented population and has been a sub awardee for grants with National University and CSUSB for the apprenticeship pathway from RCC to CSUSB, the first of its kind in the nation. These efforts have resulted in a diverse first cohort of cyberpreneur students and have aligned with initiatives like REACH and ALRISE Alliance. The CIS discipline and cybersecurity program continue to utilize best practices from organizations like CSSIA and NCWIT to ensure ongoing success in DEI efforts.

Please discuss how your discipline is working to ensure your course offerings align with college strategic goals included Guided Pathways, HS/CSU/UC partnerships, accelerated courses, support courses, contextualized education, integrated academic support, etc. Has your discipline developed a Pathways Map? If not, why not?

All program course offerings are in alignment with college Guided Pathways, as well as CTE certification and transfer pathways. The CIS cybersecurity program has a well-developed pathway and transfer degree into the well-recognized cyber program at CSU San Bernardino. A pathway map has been completed. The cybersecurity program course offerings are also in alignment with California Community College Vision 2030 goals (increasing credentials, closing equity gaps, improving transfer rates, aligning programs with workforce needs, affordable accessible education, integration of technology and innovation into the educational experience) through the implementation of grant activities to close equity gaps, close alignment of the program with workforce needs through their program-specific industry advisory committee.

Have members of your discipline participated in faculty training including 3CSN, AB 705, AVID, CUE, or other training? How is the information learned being implemented within your discipline?

Faculty members in the CIS discipline participate in college FLEX and external training. However, as previously mentioned, program faculty member Berry has written and and been awarded nearly 1 million dollars in funding for various cybersecurity-related objectives for recruiting and retaining underrepresented population. He has been a sub awardee for grants with National University and CSUSB for the apprenticeship pathway from RCC to CSUSB, the first of its kind in the nation. These efforts have resulted in a diverse first cohort of cyberpreneur students and have aligned with initiatives like REACH and ALRISE Alliance. The CIS discipline and cybersecurity program continue to utilize best practices from organizations like CSSIA and NCWIT to ensure ongoing success in DEI efforts.

Please discuss your facultys' roles on Leadership Councils, committees, or academic senate.

Within the CIS discipline, two faculty members are dedicated to Cybersecurity instruction, but all faculty participate on committees for the department. This includes academic senate, senator representing Business, Law, and Computer Information Systems (BLC), BLC Curriculum Committee reprepresentative, CIS Lab Coordinator, Assessment Committee representing BLC, Distance Education committee member representing the CTE Division, CTE Advisory Committees, and District IT Strategy Council. In addition, the Cyber program both faculty members maintain a separate, cyber-specific Advisory Committee.

Please discuss your discipline's assessment activities in the last 2 years. How many SLO's were assessed? What percentage of the scheduled SLO's were assessed? How many PLO's were assessed? Is a faculty from your discipline active on the Assessment Committee?

In the CIS discipline, our Assessment process requires every full-time and part-time faculty member to complete assessment forms for their courses at the end of the term. These forms are then entered into Nuventive.
Every semester the CIS discipline assesses every SLO for every course taught for every program. All SLOs in the cyber security program were assessed. Currently, PLOs are assessed on the schedule prescribed by the Assessment Committee. The Cyber security program outcomes have been assessed. A full-time faculty member is an active participant on the Assessment Committee. All discipline faculty in CIS participate in regular assessment.

Please include any other additional factors which the Leadership Councils should know about (pending accreditation needs, significant curriculum changes, grant funding for the position, specialized faculty expertise needed, etc.)

The CIS discipline proposes a new hire in CIS with an emphasis in Cyber/Information Security to meet student enrollment and program growth, local and national labor market demand in Cybersecurity, and to expand and align the program with workforce trends and CCC Vision 2030 goals. Through CIS cyber faculty instruction and grant activities, the cybersecurity program is directly addressing several key objectives of Vision 2030 (increasing credentials, closing equity gaps, improving transfer rates, aligning programs with workforce needs, affordable accessible education, integration of technology and innovation into the educational experience).

Labor market demand for cyber security-related skills and programs is extremely strong and growing. According to Cyberseek.com, there are 469,930 openings Nationally, 39,616 openings in California. The following number of openings are available locally, Riverside-San Bernardino 1405 openings, San Diego 5755 openings, and Los Angeles 12,360 openings. By nature of the field, and exacerbated during and following COVID, what is defined as "local" employment for our technology students is defined more broadly than the immediate area surrounding Riverside. Cyber students could work remotely from California. This field provides quite a bit of mobility.

Other critical factors contribute to the timing and urgency of this request including, 1) duties and requirements associated with the CIS Cyber program accreditation/centers of excellence status, 2) CIS-Cyber program participation in grant-related activities, and 3) the request is a part of the discipline retirement/succession planning.

The RCC CIS Cybersecurity program has been recognized by the National Security Agency and Department of Homeland Security as a National Center of Academic Excellence in Cybersecurity, a covetous title given to colleges that excel in the education and development of students pursuing careers in the field of Cybersecurity. With this certification comes additional faculty curriculum, and assessment requirements. The program recognition also requires the CIS faculty maintain the Riverside City College Cybersecurity Center, a college and community resource designed to provide access to technology and resources to assist students in pursuit of a career in cyber defense as well as to provide for staff, faculty, and community, resources on information security awareness and online safety for both adults and children.

Participation in grant opportunities is a critical requirement of all CIS faculty. Federal, State, and local grants fund advanced technology, student cyber assistants and peer mentors, staff and resource requests. The current grants and workload place a minimum of .4 release time on both existing faculty, which impacts the instructional and programmatic duties. The current faculty recognize an additional faculty member is needed.

Most importantly, this request is a part of the discipline retirement/succession planning. One of the 2 current faculty members teaching cybersecurity plans to retire within a year and a half. We must hire an additional faculty member as soon as possible in order to insure informed transition occurs *before* the retirement and have 3 full-time Cybersecurity faculty members in place. The faculty recognize that the hiring need is current and prudent. We want be replacing a single replacement due to retirement to ultimately have 3 faculty for this program after the retirement and replacement. To delay hiring could harm program continuity. Additionally, cybersecurity faculty hires require specialized expertise and certifications, as well as industry working experience. Hiring qualified faculty to teach cybersecurity can be a challenge, especially in such a high-demand field. In our experience, each of our past cyber security hires required multiple extensions to obtain a diverse and qualified pool. We need to begin our search process as soon as possible.