Computer Information System-FD

De Anza Faculty Request Form Division

Business, Computer Systems, and Applied Technologies

Department/Program

Computer Information Systems

Details on Faculty Positions Requested

* if requesting more than one position within the same area, please provide the area's priority ranking for each position to help inform RAPP of the priority preferences as determined by the area

Position	Replacement or Growth	Retirement/Resignation Date	Instruction, Non- Instruction, Both	If 'Both', indicate the ratio of instruction to non- instruction	f *Area Ranking
Faculty Position 1	Replacement	Thank you for asssigning CIS this position	Instruction	-	-
Faculty Position 2	Replacement	Retirement effective June 30, 2023	Instruction	-	1
Faculty Position 3	Replacement + Growth	Article 18 Semi-retirements (2 current) + enrollment growth of 12% since 2018-19	Instruction	-	2

Guiding Principles

De Anza College's mission and Educational Master Plan serve as guiding principles for programs to facilitate continuous development, implementation, assessment and evaluation of their program effectiveness as part of ongoing planning efforts.

De Anza identified the following areas within its Educational Master Plan:

• Outreach, Retention, Student-Centered Instruction and Services, Civic Capacity for Community and Social Change

Through its Equity Plan Re-Imagined, it identified the following framework to work towards narrowing long-standing equity gaps:

Racial Equity: Faculty members, classified professionals and administrators should: recognize the realities of race and ethnicity for students of color. Develop intersectional understanding of the ways in which institutional racism shapes educational access, opportunity and success for Black, Filipinx, Latinx, Native American, Pacific Islander and other disproportionately affected students.
Student Success Factors: The College should ensure students: Feel connected to the college; Have a goal and know what to do to achieve it; Actively participate in class and extracurricular activities; Stay on track – keeping their eyes on the prize; Feel somebody wants them to succeed and helps them succeed; Have opportunities to contribute on campus and feel their contributions are appreciated.

Based upon these guiding principles, please provide information for each of the following areas:

A. Instructional Faculty

Faculty Position Request Data Sheet





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Fill Rates Business/Computer Systems - Computer Information System-FD

	2018-19	2019-20	2020-21	2021-22	2022-23
Enrollments	8,711	9,127	10,027	9,086	9,428
Sections	232	249	266	268	279
Fill Rate	96%	95%	96%	90%	96%

Success and Equity

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	2018-19	2019-20	2020-21	2021-22	2022-23
Success Rate	75%	77%	77%	76%	77%
Withdraw Rate	12%	13%	14%	13%	11%
Equity Gaps	-17%	-16%	-15%	-14%	-16%

Faculty Load Ratios

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	2018-19	2019-20	2020-21	2021-22	2022-23
Full Time	35%	34%	31%	32%	25%
Part Time	55%	53%	56%	56%	64%
Overload	10%	12%	13%	12%	11%

Awards

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	2018-19	2019-20	2020-21	2021-22	2022-23
Certificates	109	107	147	86	90
Associate Degrees	25	22	34	32	22
Associate Degree for	59	88	145	119	127

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 Transfer
 To any other accounted begree for
 To any other accounted for apportionment for the report years (i.e., Apprenticeship, noncredit and other students who do not necessarily have a reported grade). Cross-listed courses are included in the home department. Some courses may continue to be listed but no longer have data due to repumbering or because the course was

courses are included in the home department. Some courses may continue to be listed but no longer have data due to renumbering or because the course was not offered in the past five years.

1. How does the department use the data listed above to develop, adapt, and improve teaching and learning to respond to the needs of changing environments, populations served, and evolving institutional and state priorities?

Background applying to all three positions requested:

There are currently 37 active part-time faculty. CIS faculty have always valued part-time faculty to instruct the "cutting-edge" classes. Currently this is the case when part-time faculty teach the following courses: CIS 5 Swift Programming, CIS 3 Business Information Systems, CIS 4 Computer Literacy, CIS 44H R Programming, CIS 44F Introduction to Big Data and Analytics, CIS 46Fundamentals of Digital Security, CIS 57 Website Administration, CIS 102 Ethical Hacking, CIS 104 Digital Forensics and Hacking Investigation, CIS 105 Cloud Security Fundamentals to list a subset.





Issue is the majority of classes in our core courses (CIS 22A, CIS 22B, CIS 22C, and CIS 21JA) should be taught by full-time faculty. For the core courses we wish for the students to be well-supported knowing that their learning is the main goal. To accomplish this, best practices need to be developed and more importantly they must be practiced by all faculty teaching these classes. Industry background partners bring wonderful accomplishments and knowledge to the department but sometimes lack the expertise in conveying that knowledge to their students. Looking at the proposed schedule for this Fall 2023 there are a total of 35 sections counting as "core classes" for transfer. Twenty-nine of these sections or 83% are scheduled to be taught by part-time instructors.

In being granted a total of three faculty positions (two more) we will be able to support our core transfer program, offer CTE programs in areas providing living wage career opportunities in short (1-2 years) timeframe, develop a wider set of offerings in the "cutting edge" of technology areas.

2. Other information, if any?

Percentage of course sections being taught by full-time faculty has been steadily decreasing since 2018-19. It has fallen 28%! Percentage is at a new low of 25.2% at the very time that there are so many branches of computer science/technology to be taught: minimium of four programming languages, networking, database management, data science, cloud computing, security, project managment and the list goes on. Thank you for the one new hire. Note that the percentage of courses being taught by full-time faculty across De Anza campus is 37.7%. With the one new hire (assuming no change in FTES) we will be at 28.8%. Even with one more for a total of two that would be 32.4% - still 5+ percentage points below the average for the College. And, we are involved in everything: CTE program, partners with UCSC, dual enrollment program with Fremont Union High School District, noncredit, Google certificate, LinC program, greater than 5 computer science clubs with a Hackathon, CMC National Programming Contests, ZTC including trying for the Grant, ... Please two more replacements. Also we have two on article 18.

B. Non Instructional Faculty

1. Describe the data used to develop, adapt, and improve teaching, learning, and/or support to enable this position to respond to the needs of changing environments, populations served, and evolving institutional and state priorities (this may include a description of the population served, student needs and experiences from surveys or focus groups, or ratios related to the number of students served relative to current occupational standards).

N/A

2. How does the program use these data to develop, adapt, and improve teaching, learning, and/or support to respond to the needs of changing environments, populations served, and evolving institutional and state priorities?

N/A

3. How does the position support on-going college operations and/or student success?

N/A

C. Instructional and Non Instructional Faculty Justifications

Why is the position needed and how would the position contribute to the health, growth, or vitality of the program?

Position 1 assigned to CIS - Thank you!

Why is Position 2 needed and how ...

Retirement

Strong background with Python and R programming along was data science. (Critical to stay on top of educating our students for the *current trends in technology*). Without this position we will not keep attracting more students. Clare Nguyen has been making this area her goal both in developing curriculum and teaching the subjects. However, as this area grows, we need another person to help teach the courses.

Why is Position 3 needed and how ...

One retirement was person managing security program and now we have 2 faculty on Article 18

Strong background and coursework in security. (Critical with the retirement of Mark Sherby who oversaw and contributed to the scheduling of security classes and developed curriculum including revisions.)





2. How does this request align with the goals in the Educational Master Plan?

Full-time faculty are generally closer to the pulse of the college and are more focused on the long-term goals as outlined in the Educational Master Plan. These goals support all students but are particularly focused for groups that are experiencing the greatest disproportionate impacts across all metrics:

- Outreach to Historically Under presented Populations While CIS department works with Outreach by attending spring Enrollment Day, high school campus visits, Villages Open House, Welcome Day the number of full-time faculty is spread thin to cover all of these. We have developed three noncredit certificates and programs and three more on the way effective Fall 2024. Many credit courses have mirrored noncredit offerings. More are in the curriculum pipeline and become effective Fall 2024.
- Course success As stated above in 5.2 under Interventions:
 - Free access to zyBooks for all beginning programming students
 - LinC program (Abeer Alameer FT) with CIS 22A beginning programming course and MATH 1A first quarter calculus.
 - Volunteer Teaching Assistant program and paid peer tutoring program
- Assist students in transfer Faculty are the first line of support to encourage and advise students in transfer offering them nuances in how to be successful in transferring and beyond.
- Degree and certificate training Continue and increase workshops to encourage students to attain certificates and degrees as they
 work toward goal of transferring. Work with Advisory Board to update requirements and offerings in the area of certificates and
 degrees.

Workforce training – Develop more certificates such as Information Technology Technical Support that lead directly to employment. Increase noncredit offerings.

3. How does this request align with the College's Equity Plan Re-Imagined?

All initiatives mentioned in #2 as aligning to "goals in the <u>Educational Master Plan</u>" could be broadened and increased with more full-time instructors on board.

With the hiring of Position #1 and #2 course work in data science, AI and machine learning can be developed and offered. With the hiring of position three noncredit work in the area of Cybersecurity can be developed and offered.

4. Are there any special regulations such as law, Title 5, Education Code, student success initiative or accreditation standards, etc. for the position? Provide documentation.

Hold Harmless is in place through 2024-25 and then any increases the College receives will be based on SCFF formula. Thus, we need to further persuade students to seek a degree and one or more certificates as the pursue their transfer pathway.

For our students first and foremost and secondarily for accreditation purposes, more subcommittee work within the department should take place to strengthen our core transfer courses.

5. Explain how the work will be accomplished if the position is not filled.

If we do not have these full-time positions, the following initiatives that are already in place will need to be relied upon more:

- Continue indefinitely with providing students in the beginning programming courses with zyBooks at no charge to the student.
- Broaden Volunteer Teaching Assistants and Paid Peer Tutoring programs.

The CIS Department will not be able to expand the course offerings into data science, cloud computing, AI, etc. as much as we would like.

The CIS Department will not be able to expand noncredit offerings.

We will not be able to support all computer science student clubs.

6. Other information, if any.

N/A

This form is completed and ready for acceptance.



