

# **SKYLINE CPR Report**

2023 - 2024

SKY Dept - Network Engineering Technology

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## **Program Information**

## **Assessment Unit Information**

## **Program Type**

Instructional

**Division** 

Science, Technology, Engineering and Math (STEM)

**Assessment Contact** 

Norman DelPrado

**Comprehensive Program Review** 

2023 - 2024

**Program Review Update** 

Fall 2021,Fall 2026

## 2023 - 2024

## **Instructional Comprehensive Program Review**

**Submitter Name:** 

Norman DelPrado

Submission Date:

03/22/2024

#### **BACKGROUND**

#### 1.A. DIVISION:

Science, Technology, Engineering, and Mathematics (STEM)

#### **PROGRAM NAME:**

**Network Engineering Technology** 

#### 1.B. YEAR OF REVIEW:

2023-2024

#### 1.C. PROGRAM REVIEW TEAM

Norman del Prado - Program Coordinator/Professor, Radni PirehAbdollahKandi - Assistant Professor/IT Professional, Jing Folsom - Dean STEM, Leanna Pangan - Adjunct Faculty

#### 1.D. CONNECTIONS TO THE COLLEGE MISSION/VISION/VALUES:

i. Describe the program, its purpose, and how it contributes to Skyline College's Mission, "To empower and transform a global community of learners."

The Network Engineering (NETX) program provides both essential and advanced career technical education in the field of Information Technology. This education encompasses end-user device support, networking infrastructure technologies (including design and implementation), as well as systems administration in cybersecurity, data center, and cloud solutions.

#### The Program Goals are:

- 1. To educate students with the requisite knowledge and skills for entry-level employment
- 2. To educate working professionals in advanced knowledge and skills for career advancement
- 3. To cultivate students' knowledge, skills, and strategies in obtaining industry-recognized certifications
- 4. To provide students with the required or elective courses necessary for transferring to a four-year business information systems, computer science, or engineering degree program

Our program's underlying pedagogy is designed to cultivate students' analysis, synthesis, and application skills, empowering them to become successful learners in the evolution of technology. Classes in the NETX program are taught by IT professionals actively working in the industry, within a classroom/lab environment that closely mirrors industry settings. We utilize industry use cases to reinforce theoretical concepts and incorporate lab exercises directly relevant to day-to-day operations.

#### ii. Alignment with the College Values:

Student Success and Equity, Academic Excellence, Community Partnership

#### For each chosen Value, provide a concrete example of how each connects to your program.

Student Success & Equity - The NETX program collaborates with Skyline Strategic Workforce Development to offer courses in High School Dual Enrollment and Adult Programs. At the request of the Chancellor's Department, NETX conducts workshops with lab activities and invites graduate speakers to aid in international

student recruitment efforts. Upon requests from the SMCCD IT management, NETX delivers ad hoc workshops to their field technicians.

Academic Excellence - Classes are taught by working professionals from the IT industry, ensuring representation from all genders, while network labs mimic current industry hardware and software network infrastructure. All courses adhere to industry IT guidelines and certificate content knowledge. The program offers emerging areas of study in cybersecurity, cloud computing, and data center infrastructure, which are integrated into other classes. NETX coordinates with both private and public sectors to provide student internships. Partnerships with companies like Equinix (a Fortune 500 Data Center/Cloud Solution provider) and the San Francisco Public Utility Commission (one of the largest local government agencies) have resulted in numerous full-time employment opportunities for our students.

Community Partnership - The NETX program collaborates with an Industry IT Advisory Committee comprising companies such as Equinix, Rosendin Aviation, Google, SF Public Utilities Commission, and VA Disaster Recovery, to provide guidance in keeping the program current and anticipating industry trends.

#### 1.E. PROGRAM PERSONNEL

i. Provide the current Full-Time Equivalent (FTE) of each category of personnel:

Ful	ll-tim	e Fa	culty	/ FTE:

1

**Adjunct Faculty FTE:** 

2.18

**Classified Professionals FTE:** 

0.1

Manager/ Director FTE:

0

Dean FTE (if applicable):

0.08

ii. Describe any changes in staffing since the last CPR, and how the change(s) have impacted the program. Are there any unmet needs in the program pertaining to program personnel (e.g. staffing, schedule limitations, turnover)? If yes, please specify.

We have introduced two new classes, NETX 403 - Cloud Infrastructure Essentials and NETX 405 - Data Center Infrastructure, based on recommendations from the Advisory Committee. These courses provide students with the education and skills necessary for IT occupations, enabling them to qualify for internships offered by Equinix on an annual basis. Initially, the decision to reduce the number of classrooms (lecture/lab) from three to two in Building 19 was seen as an efficient use of space. However, the renovation of Building 19 has led to an issue with air circulation, affecting the temperature of the network equipment, causing it to exceed 80 degrees. The use of a large fan to circulate air has resulted in unhealthy conditions in the classrooms. Moreover, this reduction in classrooms has now impacted our ability to offer classes on the most efficient schedule for student graduation. Additionally, limited storage space makes it difficult to access equipment donations, and the outside doors to the classrooms are badly weathered, resulting in gaps that allow rain seepage.

#### 1.F. PROFESSIONAL DEVELOPMENT

i. Summarize key professional development that the program personnel have engaged in since the last CPR to meet both the mission of the program, and the aim of the College to increase equity.

Key Professional Development

- \* Project Management Professional PMP
- \* Certified Information System Security Professional ISC2
- \* CECP (Carrier Ethernet Certified Professional) issued by MEF (Metro Ethernet Forum)
- \* CFOT (Certified Fiber Optic Technician) and CFOS (Certified Fiber Optic Specialist/Instructor) issued by FOA

(Fiber Optic Association)

- \* Cyber-terrorism in cloud workshop
- \* OSHA 10 certification
- \* Cisco Certified Network Associate Cisco
- \* Security Pro Net Lab certification
- \* Server Pro MS: Install and Storage Workshop
- \* Linux Administrator Certification
- \* Introduction to VMware VM Certification
- \* Distance Education Training Skyline College

#### Increase equity

- \* Awareness of Harassment Prevention
- \* Civility in Workplace for Supervisor
- \* Diversity on the Job
- \* Unconscious biases training
- \* Sexual Harassment training
- \* Social & Physical Distancing

ii. Are there any unmet needs pertaining to professional development, and potential ways to address these unmet needs? Please specify.

N/A

#### **CURRENT STATUS**

#### 2.A. ACHIEVEMENTS

## Describe the program's achievements since the last CPR.

The NETX Program continues to enhance its curriculum to reflect new technologies, address workforce needs, provide an industry network laboratory, foster industry partnerships, and hire experienced, certified, and educated IT professionals to deliver quality education, ensuring the success of students in their IT endeavors.

- 1. Launched 3 new elective courses for the NETX AS degree and AS certificate. The courses were approved by the Curriculum Committee and recommended by the Advisory Committee. These courses focus on technology that the industry requires of the IT workforce:
- a. NETX 402 Cybersecurity Infrastructure
- b. NETX 403 Cloud Infrastructure Essential
- c. NETX 405 Data Center Infrastructure
- 2. Relocated and consolidated 3 classrooms/networks from Building 2 to 2 classrooms in Building 19. In collaboration with the Skyline Construction Team and District IT, we designed a classroom/lab (network) that simulates data center and network use for cloud solutions, cybersecurity, and IT applications. (It has been commented as one of the better network labs by the Advisory Committee).
- 3. Internship Program
- a. Equinix, a Fortune 500 Company specializing in cloud and data center services, has established a yearly program providing NETX approximately 5-10 internship availabilities. The soft launch began in Fall 2022, with currently about 6 students leading to job offers from Equinix or its affiliate companies.
- b. SF Public Utilities Commission Ad hoc internship program. Four interns were offered full-time employment as desktop support, analysts, or network engineers.
- 4. Outreach Program In collaboration with Strategic Work Force Development (SWFD), which supports the Dual Enrollment and Adult High School programs.
- a. Develop classroom/network lab with equipment from classroom/lab consolidation (approved by Skyline Accounting) and funded by the budget from SWFD.
- b. Dual Enrollment
- i. Location: Capuchino High School
- ii. Duration: 2017 to present, 3 courses offered

- c. Adult Program
- i. Location: Westmoor High School and Capuchino High School
- ii. Duration: 2022 to present, 3 courses offered
- d. Courses have been instructed by NETX graduates with BS degree and Vendor Certification.
- 5. Additional Industry Certification from The Fiber Optic Association www.foa.org
- a. Two adjunct faculty have been instructor certified.
- b. NETX 410 Structure Wiring Cabling and NETX 411 Fiber Optic courses, as well as network/lab classroom, have been approved as a training facility.
- c. Over 25+ students have passed the CFOT since its inception three years ago.
- 6. Adjunct Faculty expanded to include a woman adjunct faculty with Industry Certifications/BS degree and an IT Data Center Sr. Engineer
- 7. Skyline Veterans Administration actively supports and collaborates with our NETX adjunct faculty, who are Navy Military Veterans
- a. For the academic calendar of 2023, NETX VA students averaged 14%, while the college-wide average was 4%.

#### 2.B. IMPACTS ON PROGRAM

Describe the impacts on your program (positive or negative) by legislation, regulatory changes, accreditation, grantors, community/school partnerships, college-wide initiatives, stakeholders, and/or other factors.

Constant changes in technology and industry needs require frequent updates to NETX Program courses and network equipment. Internships are dependent on the forecasted annual budget by both the private and public sectors, which cannot guarantee a fixed number of internships.

#### **ACCESS**

#### 3.A. PROGRAM ENROLLMENT

#### What enrollment trends do you observe, and what may account for these trends?

- When comparing course enrollment on a percentage basis, the NETX department experienced minimal reduction compared to the college wide decrease from 2017 to 2022, with Skyline College seeing a decrease of 20% and NETX remaining at 0%.
- The significant reduction in NETX majors in 2020 was attributed to the onset of the global COVID-19 pandemic starting in March 2020. The majority of working IT students postponed their education due to their companies' needs to design and implement remote work technology.
- From 2017 to 2022, College wide experienced annual percentage reductions ranging from -1% to -15%. Comparing College enrollment from 2017 to 2022 resulted in a decrease of -20%.
- From 2017 to 2022, NETX experienced annual percentage changes ranging from -10% to +7%. Comparing College enrollment from 2017 to 2022 resulted in no change, returning to the second highest enrollment.
- Even though it's not part of the period review, the data provides a current trend to other similar STEM
  programs, such as Engineering, Electronics, and Computer Science. For the academic years 2022 and 2023,
  NETX usually ranks 2nd in Load and Enrolled. (See Load and Enrolled for STEM Programs table below)
- As a result of constant low enrollments and the evolution of technology, two elective courses (NETX 401 -Survey of Networking & Wireless Technology and NETX 423 - Mobile Devices) have been discontinued.
   Selected topics from these courses have been incorporated into appropriate NETX courses for the Network

Engineering AA degree and Certificate. The other discontinued elective course is TCOM 670, which students can choose between general COOP 670 or 671.

## Enrollment Trends between 2017 - 2022

#### **College Annual Enrollment Increase**

Year	2017	2018	2019	2020	2021	2017 vs 2021
College Enrollment	52,689	50,987	50,221	49,606	42,408	
Delta Previous Year		-1,702	-766	-615	-7,198	-10,281
Percentage		-3%	-2%	-1%	-15%	-20%

#### **NETX Annual Enrollment increase**

Year	2017	2018	2019	2020	2022	2017	vs 20	022
NETX Enrollment	329	328	344	308	329		-	
Delta Previous Year		·-1	. 16	-36	- 21		0 -	
Percentage		0%	. 5%	-10%	.7%		0%	

## **Comparing Annual Enrollment Percentage Growth**

Year	2017	2018	2019	2020	2022	2017 vs 2022
<b>College Percentage</b>		-3%	-2%	-1%	-15%	-20%
Netx Percentage		0%	5%	-10%	7%	0%

## College NETX

#### Enrollments by Term

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Summer	7,422	7,309	7,294	9,701	7,903
Fall	22,967	22,291	21,382	20,257	17,299
Spring	22,300	21,387	21,545	19,648	17,206
Total	52,689	50,987	50,221	49,606	42,408

#### **Enrollments by Term**

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Summer			18		
Fall	181	168	184	161	198
Spring	148	160	142	147	131
Total	329	328	344	308	329

Load and Enrolled for STEM Programs - Engineering, Electronics, Computer Science, and NETX

	STEM F	oad			
Semester	Engineering	Electronics	Comp Sci	NETX	NETX Ranking
Fall 2022	220	381	452	294	3rd
Spring 2023	183	106	381	205	2nd
Fall 2023	304	332	450	333	2nd
Spring 2024	130	272	435	351	2nd

	STEM Pro	olled			
Semester	Engineering	Electronics	Comp Sci	NETX	NETX Ranking
Fall 2022	57	58	224	113	2nd
Spring 2023	20	18	219	117	2nd
Fall 2023	80	37	223	186	2nd
Spring 2024	25	55	272	208	2nd

## Veterans Student Population at College with NETX by Percentage

- NETX Veterans make up 12% of the head count, compared to 4% in the College, with a difference of 8%.
- The number of NETX Veteran students is 200% higher compared to the College.
- We currently have two Veteran adjunct faculty members, Eric Lohman and Quintin Cortes, who each have over 10 years of teaching experience at NETX. They are currently employed by the VA.

Headcount Comparison between Fall 2023 - Spring 2024

Comparing Veterans Student Population College with NETX by Percentage (Unique Student Headcount)									
Headcount (Unique)	Fall 2023	Spring 2024							
College	4%	4%							
NETX .	12%	14%							
Delta	8%	10%							
Percentage Variance	200%	250%							
¹ (tentave	e, as of 1/16/24)	per PRIE							

## Student Credits Enrolled based on Full-time vs Part-time ( < 12 units)

Part-time students represented, on average, 77% of the Fall Semester headcount from 2017 to 2021.

## Total Credits Enrolled from 2017 - 2021

Credit Enrolled	FALL 2017		FALL 2019		FALL 2021		PERCENTAGE
Full time 12+	28	35	19	16	18	116	23%
Part Time	61	48	100	93	95	397	77%
Total	89	83	119	109	113	513	100%

#### 3.B. EQUITABLE ACCESS

Provide an analysis of how students, particularly historically disadvantaged students, are able to access the program. Specific questions to answer in your response:

i. PROGRAM ACCESS: How do your program enrollment demographics compare to that of the College as a whole and/or Division? What differences, if any, are revealed? What program, institutional, and/or external factors may have impacted equitable access, whether positively or adversely?

## **Ethnicity Comparison**

NETX is almost identical to collegewide student ethnicity demographics.

- The minor differences are as follows: NETX has a +7.9% higher representation in the Filipino category and a -6.3% lower representation in the White Non-Hispanic category.
- All other comparisons showed insignificant differences.

#### College and NETX Headcounts by Ethnicity

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	Total	Total %
Am. Ind./Alaska Native	<1%	<1%	<1%	<1%	<1%	58	<1%
Asian	20.2%	20.0%	19.4%	20.5%	20.0%	10,005	20.8%
Black - Non-Hispanic	2.9%	2.7%	2.4%	2.4%	2.6%	1,311	2.7%
Filipino	16.1%	16.0%	14.7%	13.2%	13.9%	6,249	13.0%
Hispanic/Latino	30.2%	30.9%	31.3%	30.8%	31.1%	14,475	30.1%
Pacific Islander	1.4%	1.3%	1.4%	1.4%	1.3%	681	1.4%
White Non-Hispanic	19.7%	19.2%	19.5%	20.7%	20.1%	10,252	21.3%
Unreported	2.6%	2.6%	4.0%	3.3%	3.0%	1,571	3.3%
Multiraces	6.7%	7.3%	7.1%	7.7%	7.9%	3,510	7.3%
Total	15,251	15,276	15,461	17,524	16,017	48,112	100.0%

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	Total	Total %
Am. Ind./Alaska Native				<1%	<1%	1	<1%
Asian	26.8%	21.4%	13.3%	18.5%	17.2%	98	19.5%
Black - Non-Hispanic	4.1%	1.4%	1.9%	1.5%	1.5%	12	2.4%
Filipino	22.0%	23.6%	19.6%	20.7%	17.9%	105	20.9%
Hispanic/Latino	20.3%	30.0%	38.0%	33.3%	35.1%	155	30.8%
Pacific Islander			<1%		2.2%	4	<1%
White Non-Hispanic	14.6%	12.1%	17.1%	17.8%	15.7%	77	15.3%
Unreported	6.5%	5.0%	4.4%	5.2%	4.5%	22	4.4%
Multiraces	5.7%	6.4%	5.1%	2.2%	5.2%	29	5.8%
Total	123	140	158	135	134	503	100.0%

## Gender Comparison

- The gender gap is quite apparent in the data. Female students represent 15.3% of the NETX program, whereas they represent, on average, 53.5% of the college population.
- The 15.3% figure may seem low, but when compared to the representation of female genders employed as Network Engineers, which stands at 9.4%, the NETX Program shows an increase of approximately 6% or a percentage over 50% greater. Our program is aiding in the improvement of the female workforce.
- From 2011 to 2016, CPR NETX reported 38 female students, representing 8% of the total. This increased to 77 students, reflecting an 85% increase.
- NETX will continue to engage in outreach programs aimed at attracting female students. In order to reduce
  the female withdrawal rate of 11% compared to the college-wide rate of 8%, we will request NETX tutors/lab
  assistants to help students at risk of withdrawing and continue recruiting female adjunct faculty who can
  mentor female students.

## College and NETX Headcounts by Gender

#### **Unduplicated Headcount by Gender**

	Female	Male	Unreported
2017-2018	52.0%	45.3%	2.7%
2018-2019	52.7%	44.8%	2.5%
2019-2020	52.4%	45.0%	2.6%
2020-2021	55.7%	41.9%	2.3%
2021-2022	54.2%	43.3%	2.6%
Total	25,724	21,161	1,227
Total %	53.5%	44.0%	2.6%

	Female	Male	Unreported
2017-2018	11.4%	82.9%	5.7%
2018-2019	14.3%	81.4%	4.3%
2019-2020	16.5%	81.0%	2.5%
2020-2021	13.3%	84.4%	2.2%
2021-2022	15.7%	82.1%	2.2%
Total	77	412	14
Total %	15.3%	81.9%	2.8%

Percentage of Women in Network Engineering Roles

## DEMOGRAPHICS AND STATISTICS IN THE US

Network engineer demographics research summary. Zippia estimates network engineer demographics and statistics in the United States by using a database of 30 million profiles. Our network engineer estimates are verified against BLS, Census, and current job openings data for accuracy. Zippia's data science team found the following key facts about network engineers after extensive research and analysis:

- There are over 168,129 network engineers currently employed in the United States.
- 9.4% of all network engineers are women, while 90.6% are men.

Reference: https://www.zippia.com/network-engineer-jobs/demographics/#gender-statistics

## Age Comparison

NETX students have an older age demographic compared to College Wide. College Wide has almost 50% of students in the 18-22 years age group, whereas NETX comprises only 23%. Additionally, College Wide 23-39 age group accounts for about 39%, while NETX has 59%.

	Stuc	Student Age Demographics Comparison								
	College Wide			· · · · · NE	ETX ·					
	Count	Percentage		Count	Percentage					
Age 18 - 22	20,164	49.8%		74	22.7%					
Age 23 - 28	9,725	24.0%	20.49/	100	30.7%	59.2%				
Age 29 - 39	6,236	15.4%	39.4%	93	28.5%	39.2%				
Age 40 - 49	2,293	5.7%		34	10.4%					
Age 50 - 59	1,349	3.3%		19	5.8%					
Age 60 +	740	1.8%		6	1.8%					
Age Unreported	1	0.0%		0	0.0%					
	40,508	100%		326	100%					

Note- Dual Enrollment Students excluded

ii.COURSE ACCESS: Provide analysis of enrollment trends for each course. Which course(s) have declining enrollment, and why might that be the case? What insights do you gain from the impact of course offering patterns?

Historically, fluctuations in course demand have shown a significant correlation with economic prosperity, lower enrollment rates, and students entering the job market showing interest in trending marketing topics.

- As a result of COVID-19, starting in March 2020, many IT working students were requested to work additional hours and postponed their education.
- Specific courses such as NETX 430 and NETX 431 are offered every semester since they are feeder courses and required for the Certificate or AS in Network Engineering.
- We have removed/banked three courses from the list of electives.
- Not in this review, but for the next CPR review, three new courses: NETX 402 Cybersecurity
  Infrastructure, NETX 403 Cloud Infrastructure Essential, and NETX 405 Data Center Infrastructure had
  high enrollment in their first offerings.
- The NETX 413 Wireless LAN, an elective coures will be reviewed to determine future offerings.

## Total Enrollment by Course

Headcount by Course	FA17	SP18	FA18	SP19	SU19	FA19	SP20	FA20	SP21	FA21	SP22	Grand Unduplica ted Total	Notes
NETX-400						80	12		13		12	348	110100
NETX-400			23			26	12	13	13	19	20	122	Elective Course
NETX-411		21	23	15		20	13			10	10	67	Elective Course
NETX-413			12	10		8	10	7		12	10	55	Elective Course
NETX-420		24	12	20		-	25		25		17	109	
NETX-423		13										13	Course deleted
NETX-430		_	18	18		10	10	16	7	10	9		Feeder & Req Course
NETX-431	13	13	20	12		6	7	12	3	7	9	102	
NETX-432	22		17			15		14	9	6		82	Require Course
NETX-435	20		22			13	11		16	11	8	95	_
NETX-439	23		19			12		9		13		75	
NETX-440		29		20			14		15		17	89	Require Course
NETX-443	22		14	35		10	40	10	50	35	29	245	Elective Course
NETX-450				13								13	Course deleted
NETX-670	5	11		11		4	10	5	9	3		40	Course banked
NETX-880SA					18							18	<b>Experimental Course</b>

iii. What efforts, if any, have been made to increase equitable access to your program? If more is needed, consider making it one of your program goals in the Action Plan.

The NETX department has led or supported the following efforts:

- \* District: International Students Recruitment Program & District IT Field Technician workshops provide complementary education to existing District staff.
- \* College: Expanding Your Horizon, Meet Your Majors aimed at increasing female student enrollment.
- \* Community: Strategic Workforce Development Dual Enrollment & Adult Programs, with a focus on increasing high school students and adult enrollment.
- \* Veterans Association: Liaison from our VET adjuncts and working on the Credit Prior Learning Initiative Marianne Beck/Gina Cardialla to continue supporting Veterans entering Skyline.

#### **EFFECTIVENESS**

## 4.A. OVERALL AND DISAGGREGATED COURSE SUCCESS RATES

Comment on course success rates and with particular attention to any observed equity gaps. Specific questions to answer in your responses:

- i. How do the overall course success rates compare to the College and/or Division success rates?
- The NETX success rate of 84.90%, compared to the college's 76.30%, is about 11.27% higher.
- The NETX retention rate of 92.4%, comparable to the college's 92.1%, is the same, which also translates to the withdrawal.
- Based on percentage NETX exceeds the college average and same in the retention/withdrawal category

## Comparison of Course Success and Retention between the College and NETX

Success Comparison based on Percentage							
	Success	Retention	Withdrawal				
Skyline Wide	76.3%	92.1%	7.9%				
NETX	84.9%	92.4%	7.6%				
Difference	8.6%	0.3%	-0.3%				
NETX % Difference	11.3%	0.33%	-3.8%				

## College-Wide

#### COLL

## **Annual Course Success and Retention**

	Enrollments	Success Count	Success Rate	Retention Rate	Withdrawal Rate
2017-2018	52,689	40,020	76.0%	87.8%	12.2%
2018-2019	50,987	39,026	76.5%	88.3%	11.7%
2019-2020	50,221	38,429	76.5%	91.6%	8.4%
2020-2021	49,606	38,366	77.3%	98.7%	1.3%
2021-2022	42,408	31,904	75.2%	95.0%	5.0%
Total	245,911	187,745	76.3%	92.1%	7.9%

## Department(s): NETX

₹ cor

## **Annual Course Success and Retention**

	Enrollments	Success Count	Success Rate	Retention Rate	Withdrawal Rate
2017-2018	329	274	83.3%	89.7%	10.3%
2018-2019	328	286	87.2%	91.5%	8.5%
2019-2020	344	285	82.8%	88.7%	11.3%
2020-2021	308	263	85.4%	98.1%	1.9%
2021-2022	329	282	85.7%	94.5%	5.5%
Total	1,638	1,390	84.9%	92.4%	7.6%

ii. What have you learned from reviewing the overall and disaggregated course success data? Choose disaggregations which are most relevant to programming decisions (e.g. ethnicity, gender, age, enrollment status, and/or disaggregations that are unique to your program).

## **Ethnicity**

- Comparing the variance and percentage difference with Skyline Wide:
  - Variance of within 10% considered acceptable.
  - o Any categories beyond the variance were analyzed.
- The success rate for the Filipino category was 13% higher (S = 76% vs NETX = 89%) and the withdrawal rate was 3% lower (S = 8% vs NETX = 5%). Based on percentages, this equates to a 17% higher success rate.
- The success rate for the Hispanic/Latino category was 12% higher (S = 71% vs NETX = 83%) and the withdrawal rate was the same (S = 9% vs NETX = 9%). Based on percentages, this equates to a 17% higher success rate.
- The success rate for the multiracial category was 9% higher (S = 76% vs NETX = 85%), and the withdrawal rate was the same (S = 9% vs NETX = 9%). Based on percentages, this equates to a 12% higher success rate.
- All other ethnicity categories were within an acceptable range of + or -10%.
- On aggregate, NETX has a success rate 9% higher than College Wide (S = 76% vs NETX = 85%). Based on percentages, this equates to a 12% higher success rate.

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	Success Rate	Skyline All Terms	NETX All Terms	Variance (Skyline - NETX)	% (Var / Skyline)	Variance of greater than +/- 10% analyzed
Am. Ind./	Enrollment	303	2.00	N/A		
Alaska Native	Withdrawal	11%	*	N/A		
	Success	64%	*	N/A		
Asian	Enrollment	47,059	319.00	N/A		
	Withdrawal	5%	0.06	1%		
	Success	85%	0.89	4%		Variance acceptable range
Black - Non-	Enrollment	6,283	31.00	N/A		
Hispanic	Withdrawal	11%	0.16	5%		
	Success	65%	0.68	3%		Variance acceptable range
Filipino	Enrollment	45,793	351.00	N/A		
	Withdrawal	8%	0.05	-3%		
	Success	76%	0.89	13%	17.1%	NETX Filipino have higher Scucess Rate than SkylineWide
Hispanic/	Enrollment	77,304	514.00	N/A		
Latino	Withdrawal	9%	0.09	0%		
	Success	71%	0.83	12%	16.9%	NETX Lation have higher Scucess Rate than Skyline Wide
Pacific Islander	Enrollment	3,135	6.00	N/A		
	Withdrawal	11%	*	N/A		
	Success	66%	*	N/A		
White Non-	Enrollment	41,120	271.00	N/A		
Hispanic	Withdrawal	7%	0.09	2%		
	Success	80%	0.80	0%		Variance acceptable range
Unreported	Enrollment	6,442	72.00	N/A		
	Withdrawal	7%	0.13	6%	85.7%	
	Success	77%	0.81	4%	5.2%	Variance acceptable range
Multiraces	Enrollment	18,472	72.00	N/A		
	Withdrawal	8%	0.04	-4%		
	Success	76%	0.92	16%	21.1%	NETX Multiraces have a higher Scucess Rate than Skyline Wide
ALL	Enrollment	245,911	1638.00			
	Withdrawal	8%	0.08	0%	0.0%	
	Success	76%	0.85	9%	11.8%	NETX has success rate of 9% better or 11.8% better than College Success Rate

## Gender

- When comparing the variance and percentage difference with Skyline Wide, a variance within 10% is considered acceptable. Any categories beyond this variance were analyzed.
- The success rate for the female category was the same (S = 78% vs NETX = 79%). A variance of 1% is acceptable.
- The success rate for the male category was 9% higher (S = 76% vs NETX = 85%). Based on percentages, this translates to a 12% higher success rate.

## Comparison of Success Rates Based on Disaggregations between the College and NETX

		Skyline All Terms	NETX All Terms	Variance (Skyline - NETX)	% (Var / Skyline)	Variance of greater than +/- 10% analyzed
Female	Enrollment	127,983	219.00	N/A		
	Withdrawal	8%	0.11	3%	37.5%	
	Success	78%	0.79	1%	1.3%	Variance acceptable range
Male	Enrollment	112,327	1379.00	N/A		
	Withdrawal	8%	0.07	-1%	-12.5%	
	Success	75%	0.86	11%	14.7%	NETX Male student success are 11% better thatn College WIde
Unreported	Enrollment	5,601	40.00	N/A		Ĭ
	Withdrawal	8%	0.10	2%	25.0%	
	Success	76%	0.85	9%	11.8%	NETX Unreported student success is 9% betteUnr than College WIde
ALL	Enrollment	245,911	1638.00	N/A		
	Withdrawal	8%	0.08	0%	0.0%	
	Success	76%	0.85	9%	11.8%	NETX has success rate of 9%

## iii. If outcomes reveal inequity, what may be contributing factors at the program, college, and/or district level?

There are no identified inequities in ethnic categories for the NETX student success rate. All success rates are about the same or exceed the College Wide rate. Similarly, there are no identified inequities in the gender category. The success rate for women is equal to the College Wide rate, and a variance of 3% in withdrawal rate is determined to be insignificant.

#### 4.B. INDIVIDUAL COURSE SUCCESS RATES

Provide analysis of success rates for each active course. Is there a minimum success rate that you consider acceptable, and if so, what is it and why? Which courses are not at the acceptable minimum success rate? Which exhibit a success rate over time that fluctuates fairly dramatically? Which other courses are of concern to you, and why?

## Summary

In the IT industry, standards and high-tech companies predominantly use a passing grade of 70% in certification exams. The NETX Program follows industry guidelines.

Classes incorporate training materials and lab activities aligned with industry and vendor certifications.

Of the 16 courses examined in the cycle, 15 courses averaged between 77% and 99%, while one course, NETX 413, averaged 68%. However, in the last three courses offered out of five, there was a demonstrated dramatic improvement in success rates, ranging from 75% to 92%.

To continue our students' success, we are requesting a lab technician/tutor to assist NETX students.

#### Course Analysis

- Some courses have had poor success rates, but all have either demonstrated progress or were outliers.
- NETX 410, an elective course, was offered 6 times with an average success rate of 79%. One class had a success rate of 69%, which is 1% below the acceptable threshold of 70%, while the remaining classes showed improvements.
- NETX 413, an elective course, was offered 5 times with an average success rate of 79%. The first two
  courses had success rates below 70%, but the remaining three courses improved to an average of 68%,
  which is 2% less than the desired rate of 70%.
- NETX 430, a required course, was offered 10 times with an average success rate of 86%. However, one class had a success rate of 57%, which appears to be an outlier.
- NETX 440, a required course, was offered 5 times with an average success rate of 77%. One class had a success rate of 67%, which also appears to be an outlier.
- NETX 443, an elective course, was offered 9 times with an average success rate of 85%. The two classes with success rates below 70% were offered by another adjunct faculty who is no longer with us.

## **Course Enrollment Report**

#### 2017-2018 to 2021-2022

Success Rate by Course	FA17	SP18	FA18	SP19	SU19	FA19	SP20	FA20	SP21	FA21	SP22	Total Success Rate
NETX-400	78%	96%	87%	94%		73%	83%	84%	85%	93%	75%	84%
NETX-410	83%		78%			77%		69%		84%	80%	79%
NETX-411		76%		73%			85%			60%	90%	77%
NETX-413	44%		67%			75%		86%		92%	$\neg$	68%
NETX-420		92%		95%			80%		76%		71%	83%
NETX-423		100%									$\neg$	100%
NETX-430	100%	82%	94%	94%		70%	90%	81%	57%	90%	78%	86%
NETX-431	85%	92%	95%	100%		83%	86%	100%	*	100%	89%	93%
NETX-432	100%		94%			93%		93%	89%	83%		94%
NETX-435	80%		95%			100%	91%		88%	73%	88%	88%
NETX-439	91%		100%			100%		78%		85%		92%
NETX-440		72%		90%			86%		67%		71%	77%
NETX-443	59%		50%	86%		80%	85%	90%	98%	94%	90%	85%
NETX-450				92%								92%
NETX-670	100%	100%		64%	М	*	100%	80%	100%	*		91%
NETX-880SA					89%			$\overline{}$				89%

Note: A blank cell indicates that no data is available, and an \* indicates that data has been suppressed due to small student counts.

#### 4.C. COURSE AND PROGRAM SLO RESULTS

What notable conclusions were drawn from the assessment results? If available, note any differences in assessment results by key disaggregations (e.g. modality, learning communities, etc.). What have been the implications for the program? Specific questions to answer in your response:

i. What percentage of course SLOs have been assessed during the past five years?

**Number of Course SLOs:** 

37

## Percentage:

94

#### ii. How well is the program meeting its PSLOs?

The trend we can identify is success in the assessment of all course-level SLOs, with 13 courses and a combined total of 31 active SLOs meeting or exceeding their success criteria from Fall 2017 to Spring 2022. Since the Network Engineering Program provides career education with activities based on network labs using real-world applications, the average of 75% of students' age group being above 23 years, focused on career advancement or the IT workforce, ensures that students' success in course and program SLO results will be met. This was substantiated by a survey of 45 students indicating that the industry IT instructors, network labs, software simulation, and use of industry-driven content in Spring 2022 contributed to student success.

The preferred modality of learning is on campus, but to accommodate a larger student population, incorporating software simulation will facilitate learning for those students unable to be on campus. We are also investigating other remote access lab activities.

#### iii. Are the PSLOs still relevant to your program? If not, what changes might be made?

All PSLOs are current.

iv. Drawing from the last six years of course SLO assessment, which course(s) and/or course SLO(s) are of concern (e.g., not met or inconclusive results, those with action plans)?

No course of concern.

#### 4.D. COURSE ENHANCEMENTS

Which course(s) are of concern due to their course success rates, SLO results, and/or other reasons? What efforts, if any, have been made to enhance student learning in those courses? If more is needed, consider which changes may be submitted to the Curriculum Committee in the Fall, and/or making it one of your program goals.

No major courses are of concern. Updating software simulations and the current network lab to provide students with the quality education needed for success in the industry would be an ongoing focus in IT technology career education. With technological improvements in software and hardware, the NET420 - PC Configuration & Repair course, currently requiring 6 units, should be reduced to 3 units, and low enrollment classes should be reviewed to determine if they should be offered in the future.

#### 4.E. DEGREES AND CERTIFICATES

List each of the degrees and certificates separately. Comment on the number and trends in degrees/certificates awarded by your program. Specific questions to answer in your responses:

#### i. What do the data reveal about degree and certificate completion? time to completion?

Students show more interest in the Network Engineering Certificate and AS degree compared to all other specialized certificates. These specialized skill certificates were developed to meet the needs of students requiring specialized training in the shortest duration possible.

Based on a total of 55 awarded Network Engineering AS degrees, Network Engineering Certificates, and all other specialized certificates, the Network Engineering AS Degree and Certificate represented 87%, while others represented only 13%. Of this 87%, 60% are from AS degrees and the remaining 27% from Network

Engineering Certificates. Even with the specialized skills, the average number of units implies that students continue to earn other certificates with varying numbers of units.

Degree/Certificate	Total	%	Avg. Units Earned	Avg. Time to Complete
Network Engineering (Associate Degree)	33	60%	89.02	12.09
Network Engineering (Certificate)	15	27%	69.17	10.13
Subtotal	48	87%		
Other certificates				
NETX: Advanced Computer User Support	2		98.50	12.00
NETX: Entry Level Computer User Support	1		18.00	2.00
NETX: Network Engineering Cert	1		65.00	10.50
NETX: PC Configuration and Repair Cert	3		52.67	6.50
Subtotal	7	13%		
Total Earned	55	100%		

## ii. What changes do the data suggest are necessary for the program to explore?

The data implies that students in the program realize the benefits of completing the Network Engineering Certificate and/or AS degree for their educational, career development, or career changes. We need to research the interest of students graduating with a Network Engineering AS degree or certificate with advanced specializations in Cybersecurity, Data Center, and/or System Administration.

#### 4.F. LABOR MARKET CONNECTION

If appropriate for your program, given labor market data related to your program, discuss current labor trends and how your program is addressing them. How are you incorporating any of the following into program planning: Labor Market and Trends (e.g., Centers of Excellence, Burning Glass), Performance for CTE Programs (Launchboard), and/or Advisory Boards? Report out on whichever source(s) are relevant to your program.

Job Outlook per U.S. Bureau of Labor Statistics Projected for 2022 - 2032

Job Descritpion	2022-2032
Information Security Analysts	32%
Computer Occupations	14%
Computer Network Support Specialist	7%
Computer User Support Specialist	5%
Computer Support Specialist	5%
All Other Occupateions	3%

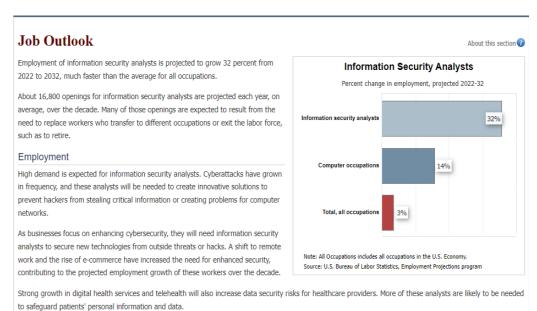
## **IT industry Trends**

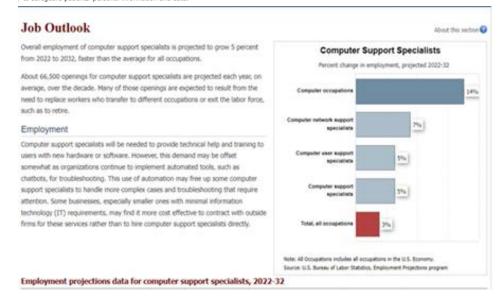
The NETX program is focused on providing relevant, current, and beneficial IT education. We deliver this education through our IT/Engineer Professional adjunct faculty, industry-driven technical content, and lab activities using industry hardware and software. The success of our NETX graduates in securing job offers substantiates the effectiveness of our pedagogy.

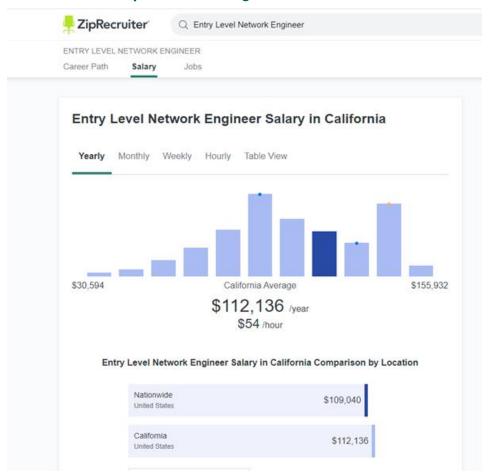
Our Network Engineering Certificate and AA Degree, along with three additional courses, address this job outlook. Our Industry Advisory Committee has communicated that the demand for security is not limited to specific jobs but that all IT jobs will need to incorporate security (cybersecurity) responsibilities. The growth in the use of Data Center Services and Cloud Solutions has increased the demand for all other jobs (Computer Occupation, Network, and Support Specialist). Our program provides the foundation for all the education needed for IT jobs in demand, which exceeds the 3% forecast of all other forecasts. As cited by ZipRecruiter, the average entry-level salary of \$112K for the SF Bay Area serves as a general baseline for other compensation, with about a variance of + or -\$25K depending on experience, certification, and education.

We launched three new elective courses (NETX 402 - Cybersecurity Infrastructure, NETX 403 - Cloud Infrastructure Essential, NETX 405 - Data Center Infrastructure) for the NETX AS degree and AS certificate in Fall 2022 with very high student enrollment. These courses focus on preparing students for high-demand IT jobs.

## Labor Market and Trends Data References







#### 4.G. STUDENT FEEDBACK

Describe how and when feedback was solicited from students, whether qualitative or quantitative, and what the results reveal. If feedback was scant, describe the attempts made and speculate why.

- There are 45 unduplicated students who completed the online survey on January 19, 2024.
- The students' objective: 60% for career & job improvements
- IT Experience: 55% had none and the remaining 45% had minimum of 1 to 3 years experience
- Education: 55% had only high school diploma and the remaining 45% had an AA to Master Degree
- NETX Program Benefit (0 = not to 5 = Very Beneficial)
  - Adjunct IT Instructors: 87% aggregate for 4 and 5
  - Use of software simulations and hands-on network labs: 91% for 4 and 5
  - Confidence to acheive goal: 77% combined for 4 &5, while 16% for 3
  - Recommending program: Yes 64%, Maybe 29% (depending on progress), and No 0%
  - Learned about the program: Website 49% followed by Counseling 22%
  - Most beneficial in your learning education: Majority commented that hands-on education on industry use cases, lab activities, working on projects, and certifications were beneficial
  - Suggestions for improvement of program: gain IT experience and lab availability
- NETX SURVEY JANUARY 2024

#### 4.H. CURRICULUM

Programs are required to update all curriculum and secure approval by the Curriculum Committee. Please indicate whether the following tasks have been completed.

Secured approval of updated courses by the Curriculum Committee

Yes

Updated the Improvement Platform with new and/or changed SLOs, after approval by the Curriculum Committee

Yes

Submitted a current assessment calendar with all active courses to the Office of Planning, Research, and Institutional Effectiveness

Yes

Reviewed, updated (as needed), and submitted degree and certificate maps to the Curriculum Committee Yes

#### **KEY FINDINGS**

Using key findings based on the analysis from this CPR cycle, develop a multi-year plan designed to improve program effectiveness and promote student learning and achievement. Commit to three-to-five new and/or ongoing goals total. Enter goals via Step 2: Goals and Resource Requests.

## 5.A. CHALLENGES AND CONCERNS

Considering the results of this year's CPR assessment, identify challenges, concerns, and areas in which further action is needed. Reference relevant sections of the CPR that provide further insight.

Challenges and Concerns

The Network Engineering Program was developed during the Internet Boom as a hybrid of Engineering and Computer Science education. The network infrastructure serves as the backbone for all existing technologies, such as printers, databases, workstations, and WiFi, evolving into critical components of IoT, Cybersecurity, Cloud, and Data Center Infrastructure. With the growth of Al and its commercial acceptance, the IT industry will experience a growing demand for IT staff skilled in data center infrastructure, cybersecurity, and robust network infrastructure.

The demographics of students are as follows: 77% are part-time students (taking less than 12 units), 59% are aged between 23 and 39 years, 55% have at least an AA or advanced degree, 60% have career and job placement goals, and 55% have no IT experience. To meet the demands of students, classes are offered in the evening by adjunct faculty who are IT working professionals, using industry equipment for hands-on activities. To reach a wider audience, we are starting to offer asynchronous online courses (estimated at 10%) with software simulations to mimic the required hands-on experience using network infrastructure equipment.

The NETX Program has a successful history of students from diverse ethnic backgrounds, female demographics, and varied IT experiences, who gain entry-level or promotional opportunities upon completion - https://skylinecollege.edu/networkengineeringtech/#student-testimonials

To provide our students with quality education, we aim to:

- \* Update or add courses and certificate with new technology.
- \* Update network lab equipment and software simulations.
- \* Develop relationships with private and public sector internship programs.
- \* Improve B19 classroom conditions, including air circulation and addressing water leakage at windows and outside doors.
- \* Acquire additional classrooms (2 classrooms, which are causing rescheduling issues) and a storage room

# **SKY Instructional Comprehensive Program Review** (donated by the industry, to serve as a staging area).

#### **GOAL**

Update Marketing Material for NETX Progam

#### **Goal and Desired Impact on Students**

NETX program marketing material - completed, website material 75% faculty completed, student testimonial 80% completed. Need assistance in collecting faculty and student's success stories and coordinating with marketing department.

#### **Year Initiated**

2017 - 2018

## Implementation Step(s) and Timelines

Coordinate with internal resource in the collection of data in updating NETX website with current faculty picture and work experience, and student's testimonials. As well as coordinating with marketing and communication department. 2024 Academic Year

## Mapping

- SKY Strategic Goals: (X Hightlight Selected)
  - Fiscal Stability: X
  - Increased Student Enrollment: X

## **STATUS**

#### **Goal Status Date**

02/26/2024

#### **Academic Year Updated**

2022 - 2023

#### **Goal Status**

Completed

#### **Goal Status Narrative**

Updated website with - program highlights, student testimonials , faculty bios and contact for internship program

#### **Resource Request**

#### **Division Name**

Science, Technology, Engineering, and Mathematics (STEM)

#### Year of Request

2023 - 2024

#### **Resource Type**

Supplies

## Funds Type - Mark all that apply.

**Recurring Cost** 

#### Level of need, with 1 being the most pressing

2

#### FOR ADMINISTRATIVE USE ONLY

#### **GOAL**

Outreach and Upgrades

## **Goal and Desired Impact on Students**

Continue with outreach program (2017) - dual enrollment with high schools and offer hybrid/online classes. Upgrade our network lab/classroom to complement students learning beyond software simulation with industry remote (logging into data center) capability which part of network engineer and system administrator responsibility.

For existing high school program goal, Jefferson and Capuchino High School classrooms have Linux and network lab equipment. Update Skyline Netx lab for remote capability to simulate data center environment as part of network engineer and system administrator.

#### Year Initiated

2017 - 2018

#### Implementation Step(s) and Timelines

Spring 2022 procure network equipment to upgrade on Skyline campus lab for high school students and future hybrid/online course learning experience as network engineer with remote capability to data center.

#### **Mapping**

- SKY Strategic Goals: (X - Hightlight Selected)

• Civic Mindedness Cultivation: X

• Increased Student Enrollment: X

• Student Support and Resources: X

• Thriving Environment: X

#### **STATUS**

#### **Goal Status Date**

02/26/2024

#### **Academic Year Updated**

2022 - 2023

#### **Goal Status**

Completed

#### **Goal Status Narrative**

NETX Website updated- Current Job Forecast, student testimonial, faculty bios and program highligts

#### **GOAL**

#### Cybersecurity and Cloud Certificates

#### **Goal and Desired Impact on Students**

Provide new certificates: Cybersecurity and Cloud. About 25% completed for certification but online course proposal for both classes will be submitted in January/February 2022 to Curriculum Committed. It will be online course with remote capability to our network lab complemented with software simulations.

#### Implementation Step(s) and Timelines

Our first phase was to develop initial courses to determine a demand from students and working professionals. Step 1- develop course format and content for curriculum committee - completed, Step 2 - submit to curriculum committed in January 2022 Step 3 Offered in Fall of 2022 or Spring 2023

#### **Mapping**

- SKY Strategic Goals: (X - Hightlight Selected)

• Civic Mindedness Cultivation: X

Increased Student Enrollment: X

Student Support and Resources: X

• Thriving Environment: X

#### **GOAL**

Relocate and Consolidate Classroom/Lab

## **Goal and Desired Impact on Students**

Relocate and consolidate 3 to 2 network classroom/lab and redesign the network lab equipment to accommodate the new classroom constraints. Relocating Bldg. 2 to Bldg. 19. Initiated 2019. Ongoing 75% completed, moved equipment that can be reused, e-wasted equipment old equipment estate, reused other excess equipment to high school, racked equipment and configured existing equipment, purchase 60% needed as result of classroom consolidation. Additional network equipment-smaller size factory form, network rack components and signage to older building Pacific Heights. Ongoing 75% completed, moved equipment that can be reused, e-wasted equipment old equipment estate, reused other excess equipment to high school, racked equipment and configured existing equipment, purchase 60% needed as result of classroom consolidation. Additional network equipment-smaller size factory form, network rack components and signage to older building Pacific Heights.

#### **Year Initiated**

2018 - 2019

#### Implementation Step(s) and Timelines

Procure the remainder of the network equipment, rack components and signage - 2022 Academic year.

#### Mapping

- SKY College Values: (X - Selected)

• Campus Climate: X

- SKY Strategic Goals: (X - Hightlight Selected)

• Fiscal Stability: X

Increased Student Enrollment: XStudent Support and Resources: X

• Thriving Environment: X

## **STATUS**

**Goal Status Date** 

02/26/2024

**Academic Year Updated** 

2021 - 2022

**Goal Status** 

Completed

**Goal Status Narrative** 

Completed

#### **GOAL**

Improve Environmentals in Two Classroom/Lab

#### **Goal and Desired Impact on Students**

Improved classroom environmentals. Existing 2 classrooms very poor air circulation and temperature gets beyond 80%. Classroom doors on public exterior have cracks and windows leaks during heavy rains

#### **Year Initiated**

2023 - 2024

#### Implementation Step(s) and Timelines

- 1- Notify Facilities & review options Fall 2024
- 2- Initiate funding request for facility improvement to improve air circulation and prevent water leakage in external doors (facing outside) and windows Spring 2025
- 3- Validate new air circulation system and doors and windows don't leak from rain Spring 2026

#### Mapping

- SKY Strategic Goals: (X - Hightlight Selected)

• Fiscal Stability: X

Student Support and Resources: X

• Thriving Environment: X

## **Resource Request**

#### **Division Name**

Science, Technology, Engineering, and Mathematics (STEM)

#### **Year of Request**

2023 - 2024

#### **Resource Type**

**Facilities** 

Briefly explain how this request helps to advance the goals and priorities of your program, the College, the District, and/or the California Community College Chancellor's Office.

For health of the students and improve classroom environment for students in class and improving facilities so water seepage through door or window will not cause damage or electrical fire

#### Cost

12,750

#### Level of need, with 1 being the most pressing

1

#### FOR ADMINISTRATIVE USE ONLY

#### **GOAL**

New Technology Courses (Cloud/Data Center, Cybersecurity, IoT)

#### **Goal and Desired Impact on Students**

Develop additional course(s) in evolving technology topics. Provide a program with current courses that meet industry needs for IT graduates to be successful in workforce

#### **Year Initiated**

2023 - 2024

## Implementation Step(s) and Timelines

Research and Identify 2 additional courses Fall 2024

Draft and submit additional courses to curriculum. Spring 2025 - Fall 2025

Offer courses - Spring 2026 to Spring 2027

#### Mapping

- SKY Strategic Goals: (X - Hightlight Selected)

• Civic Mindedness Cultivation: X

• Increased Student Enrollment: X

Student Support and Resources: X

#### **Resource Request**

#### **Division Name**

Science, Technology, Engineering, and Mathematics (STEM)

#### **Year of Request**

2023 - 2024

#### **Resource Type**

Instructional Equipment

#### **Resource Name**

Hardware and Software licenses

#### **Resource Description**

60 software licenses and 3 server

#### Funds Type - Mark all that apply.

**Recurring Cost** 

Briefly explain how this request helps to advance the goals and priorities of your program, the College, the District, and/or the California Community College Chancellor's Office.

Keep program current with growing demand of IT workforce responsible for cybersecurity. Provide high quality education for our students to be successful in workforce.

#### Cost

3,750

## Level of need, with 1 being the most pressing

2

#### FOR ADMINISTRATIVE USE ONLY

#### **GOAL**

Provide Network Lab Support

#### **Goal and Desired Impact on Students**

Provide support for maintain specialize network equipment and open lab to support student learning

#### **Year Initiated**

2023 - 2024

#### Implementation Step(s) and Timelines

Select Support - network admin for our classes Fall 2024

#### Mapping

- SKY Strategic Goals: (X - Hightlight Selected)

- Increased Student Enrollment: X
- Student Support and Resources: X
- Thriving Environment: X

#### **STATUS**

#### **Goal Status Date**

02/26/2024

#### **Academic Year Updated**

2021 - 2022

#### **Goal Status**

Completed

#### **Goal Status Narrative**

Upgraded network lab for Dual Enrollment - Capuchin H.S and Adult Program - Westmoor High School. Separating the remote lab from this goal and putting into seperate goal

#### **Resource Request**

#### **Division Name**

Science, Technology, Engineering, and Mathematics (STEM)

#### **Year of Request**

2023 - 2024

#### **Resource Type**

Student, Aides, Hourly, or Temporary Workers

#### **Resource Name**

Network Lab assistant

#### **Resource Description**

Part time Staff Support

#### Funds Type - Mark all that apply.

**Recurring Cost** 

## Briefly explain how this request helps to advance the goals and priorities of your program, the College, the District, and/or the California Community College Chancellor's Office.

Network lab assistant will provide support by maintaining and keeping software license current and doing preventive maintenance of equipment to enhance life equipment to reduce cost

#### Cost

6,500

## Level of need, with 1 being the most pressing

2

#### FOR ADMINISTRATIVE USE ONLY

#### **GOAL**

Facility - Request additional Classroom & Storage Area

## **Goal and Desired Impact on Students**

To avoid schedule conflicts as result of only 2 classrooms and unable to accept equipment donation for more student hands on activity

#### **Year Initiated**

2023 - 2024

## Implementation Step(s) and Timelines

Review needs with Dean - Fall 2024 Submit request to facilities - Spring 2025 Use class room and storage - in Fall 2025/ Spring 2026

## **Mapping**

- SKY Strategic Goals: (X - Hightlight Selected)

- Fiscal Stability: X
- Increased Student Enrollment: XStudent Support and Resources: X
- Thriving Environment: X