YEARLY PLANNING DISCUSSION

General Questions

Program Name: Architectural Technology Academic Year 2024-25

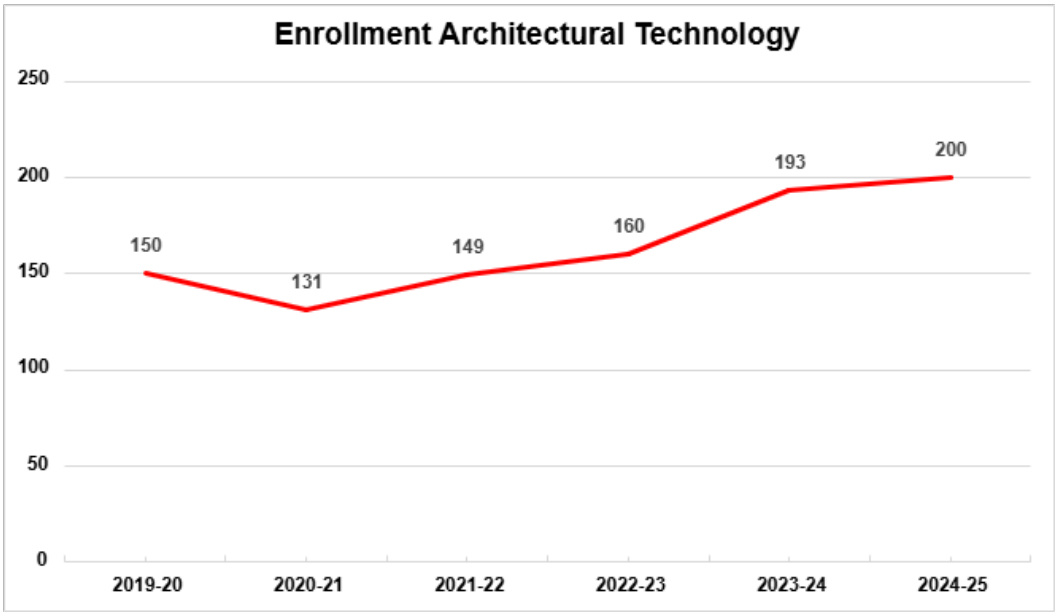
1. **Has your program mission or primary function changed in the last year?**

   There were no changes in the program mission or primary function in the last year.

2. **Were there any noteworthy changes to the program over the past year? (e.g., new courses, degrees, certificates, articulation agreements)**

   As of spring 2025, there are a total of 10 architecture courses including a new distance learning 3.0-unit course; ARCH 101: Principles of Environmental Design. This course was offered for the first time in the fall of 2024 and again in the spring of 2025. The course is taught by Cal Poly instructor Julia Rogers who was recruited last year. The course articulates with a similar course offered at Cal Poly SLO. The addition of this course to the curriculum helped increase the 2024-25 enrollment to 200, which is the highest enrollment in the past five years.

   (Figure 1) While the increase from 2023-24 to 2024-25 was 3.6% the 2025-24 enrollment (200) represents a 53% increase from the enrollment in 2020-21 (131).



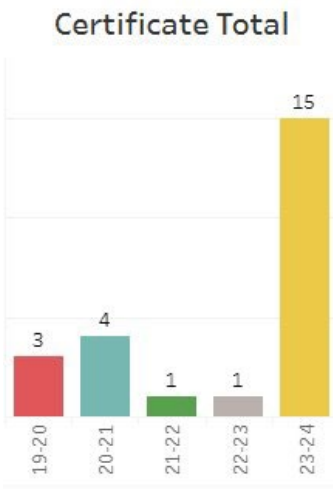
Source: Program Review: Enrollment & Headcount

3. Is your two-year program map in place and were there any challenges maintaining the planned schedule?

There has been no change in the two-year program map. The architectural technology courses are designed to minimize scheduling conflicts. The careful planning of course schedules helped students with earning a total of 15 drafting certificates in 2023-24 (See figure 2 below).

Program: Architectural Drafting | Certificate Description Detail - Duplicated

			19-20	20-21	21-22	22-23	23-24
C1NA	Certificate 6-18 Units Not Appr..	Architectural Drafting	3	4	1		2
C5	Cert 16 to <30 units	Architectural Drafting				1	13
Grand Total			3	4	1	1	15



(Figure 2) There was a significant increase in the number of Architectural Technology certificates awarded in 2023-24.
Source: Program Review: Awards

4. Were there any staffing changes?

No staffing changes were made in the calendar year 2024-25. The architectural technology program currently has one full-time faculty who coordinates the program, and four part-time faculty.

5. What were your program successes in your area of focus last year?

- During this school year 2024-25, the architectural technology program reached its highest enrollment level in five years, exceeding the enrollment numbers recorded in 2020-21 by 53% (see figure 1).

- There was a significate jump in the number of certificates earned (see figure 2). The number rose from only one in 2022-23 to 15 in 2023-24. This is an indicator that more students are working on completing their degree requirements. More time and effort are needed to help retain students and increase their success rate.

- A new distance learning course, ARCH 101: Principles of Environmental Design, was added to the curriculum. This DL course will help meet the needs of students who have course scheduling challenges.

- Canvas has been integrated into ARCH 101 taught by Cal Poly faculty Julia Rogers, who provides regular and substantive contact for this highly organized distance education course. Instructional materials are helping students master course content. The architectural technology program has been fortunate to have a highly capable, dedicated, and committed associate faculty who is working to promote student success.

- There is a plan in the works to make ARCH 101 a College NOW course to give high school students the opportunity to enroll in the course and learn about environmental design principles. In addition, the College NOW component will help boost course enrollment as well as overall enrollment of the architectural technology program.

- An additional, evening section, of ARCH 111: Architectural Graphics and Design I was added to the fall 2023 schedule to help complement the daytime section of the course and to increase the student base. This increase helped boost enrollment in advanced courses including ARCH 112: Architectural Graphics and Design II. ARCH 111 will be offered during this summer session of 2025, to help high school students get a head start.

Learning Outcomes Assessment

a. Please summarize key results from this year's assessment.

- In the Fall of 2023, Program learning outcome 4: Produce a comprehensive architectural project that demonstrates capacity to make design decisions across scales, was assessed in the advanced course ARCH 151: Architecture Design Studio I. 77.78% of students met the standards and 22.22% exceeded standards.

- In the Spring of 2024, Program learning outcome 4: Produce a comprehensive architectural project that demonstrates capacity to make design decisions across scales, was assessed in the advanced course ARCH 152: Architecture Design Studio II. 30% of students met standards and 70% exceeded standards.

- In the Fall of 2024, Program learning outcome 1: Communicate graphically using both manual and computer-aided methods, was assessed in the beginning course ARCH 111: Architectural Graphics and Design I. 4.55% were below standards, 4.55% were slightly below standards, 59.09% met standards, and 31.82% exceeded standards.

- In the Fall of 2024, Program learning outcome 2: Produce a set of architectural plans that may be submitted for plan check approval, was assessed in the introductory course: ARCH 121: Architectural Practice. 8.7% were below standards, 8.7% were slightly below standards,73.91% met standards, and 8.7% exceeded standards

b. Please summarize your reflections, analysis, and interpretation of the learning outcome assessment and data.

- The assessment results above show that across the assessed courses, more than 70% of students met or exceeded standards. The % of students below or slightly below standards did not exceed 16.4%.

c. Please summarize recommendations and/or accolades that were made within the program/department.

- The American Institute of Architecture Students (AIAS) club won an award for the best architecture club in the country. Hancock AIAS faculty advisor Daniel Pena Sosa and the club president Jet Wu both travelled to Austin Texas to receive the award.

- AHC architectural technology students Jet Wu and Raymond Gutierrez won first and second place respectively in the Skills USA Regional architectural drafting competition. Both Jet and Raymond will be competing in the Statewide architectural drafting competition this April in Ontario CA.

- In February 2024, architecture student, Jet Wu, won the regional championships in the Skills USA architectural drafting competition. In April 2024 Jet won the Skills USA State championship. In June of 2024, Jet, as well as Allan Hancock College, represented the state of California in the Skills USA national competition in Atlanta Georgia.

- In April 2025 Jet won the Skills USA State championship. In June of 2025, Jet, as well as Allan Hancock College, will represent the state of California in the Skills USA national competition in Atlanta Georgia.

d. Please review and attach any *changes* to planning documentation, including PLO rubrics, associations, and cycles planning.

No changes to the planning documentation or the PLO rubrics were made. Work on the revision of the rubric was completed three years ago included the reduction of PLO from seven to four. The revised outcomes were more comprehensive.

Distance Education (DE) Modality Course Design Peer Review Update (Please attach documentation extracted from the *Rubric for Assessing Regular and Substantive Interaction in Distance Education Course*s)

a. Which courses were reviewed for regular and substantive interactions (RSI)?

The architectural technology program has only one DL course: ARCH 101: Principles of Environmental Design.

b. What were some key findings regarding RSI?

- Some strengths:

The instructor provides the following to meet substantive interaction requirements:

- Articulates how students can connect with the instructor.
- Posts regular announcements in the learning management system (Canvas).
- Provides timely, constructive, and in-depth feedback on student assignments.
- Creates discussion forums where students can interact and explore concepts.
- Schedules check-ins with students who aren't submitting work or participating in activities.

- Some areas of possible improvement:
- Provide regularly scheduled virtual office hours
- Facilitate a group discussion regarding the content of the course

c. What is the plan for improvement?

- Clearly convey expectations for course interactions, both for students and instructor, through the syllabus and class schedule
- Substantively interact with students on a predictable and scheduled basis
- Monitor each student's engagement and success
- Proactively identify and aid students in need
- Follow up with the student as needed

CTE two-year review of labor market data and pre-requisite review

a. Does the program meet documented labor market demand?

- According to the US Bureau of Labor Statistics 16,900 openings for drafters are projected each year, on average, over the decade. All of those openings are expected to result from the need to replace workers who transfer to other occupations or exit the labor force, such as retiring.

  Source: https://www.bls.gov/ooh/architecture-and-engineering/drafters.htm

- In May of 2023. The employment of architectural and civil drafters in California was estimated at 13,350. Source: https://www.bls.gov/oes/current/oes173011.htm#st

- According to Labor Market Information Reports F23 published by Lightcast, SLO and SB counties are hotspots for architectural and civil drafters' jobs. The national average for an area this size is 243 employees, while there are 271 here. This higher-than-average supply of jobs may make it easier for workers in this field to find employment in this area.

Source: https://www.hancockcollege.edu/ie/documents/F23_Architectural_and_Civil_Drafters.pdf

b. How does the program address needs that are not met by similar programs?

The architectural technology program provides students with the knowledge and skills needed for entry-level architectural CAD drafting positions. The program offers courses in Building Information Modeling BIM which is required by 100% of large architecture firms with 100 or more employees. Furthermore, 75% of medium-sized firms require Revit knowledge and experience. In addition, the program offers courses such as the California Building Code. Code knowledge and application is needed by many building industry professionals including contractors, architects, and plans examiners.

There are no other programs in Santa Barbara County that offer a comprehensive architectural technology program that prepares students for employment and transfer.

c. Does the employment, completion, and success data of students indicate program effectiveness and vitality? Please, explain.

- The success rates of the architectural technology program (see bar chart on page 10) were higher than the success rates of the college over the three calendar years 2021-22 to 2023-24. In addition, the architectural technology retention rates over the same three-year period were higher than the college's retention rates.
- There was a significate jump in the number of certificates earned (see figure 2 on page 2). The number rose from only one in 2022-23 to 15 in 2023-24. This is an indicator that more students are working on completing their degree requirements.
- A comparison between the overall efficiency of the college and the architectural technology program efficiency shows that in the calendar years 2022-23 and 2023-24, the efficiency rates of the architectural technology program were slightly lower that the overall efficiency rate of all programs.

d. Has the program met the Title 5 requirements to review course prerequisites, and advisories within the prescribed cycle of every 2 year for CTE programs and every 5 years for all others?

We are currently waiting for the new CurriQunet process for course review to be finalized. We have reviewed pre-requisites, co-requisites and advisories of all classes and there were no changes needed.

e. Have recommendations from the previous report been addressed?

- Work with employers on ways to increase entry-level qualifications: this recommendation continues to be work-in-progress. There are two part time instructors teaching in the architectural technology program who are connected to industry. The two instructors are a valuable resource for knowledge about industry needs. Both instructors are also part of the advisory committee and continue to help.
- Work with employers on enhancing internship opportunities: time and effort is ongoing towards fulfilling this recommendation. One of our architecture students found success with remote employment at an architecture firm located in Oregon State.

Use the tables below to fill in **NEW** resources and planning initiatives that **do not apply directly to core topics.** ***This section is only used if there are new planning initiatives and resources requested.***

Sample:

Resource Requests: Please use the Resource Request Excel template located on the Program Review web page to enter resource requests for equipment, supplies, staffing, facilities, and misc. resources needed. Send completed excel document along with completed program view core topic for signature.

New Program Planning Initiative (Objective) – Yearly Planning Only	
Title (including number:	3D printers for architectural model making
Planning Years:	*2025-26 2026-27*
Description: 3D printed parts are essential for architectural model making. Students will utilize 3D printers to produce more complex parts that cannot be produced with the laser cutter. The production of high-quality architectural designs and models are essential to the success of students in both transfer and workforce entry. *(A more detailed version of initiative. Please include a description of the initiative, why it is needed, who will be responsible, and actions that need to happen, so it is completed.)*	
What college plans are associated with this Objective? (Please select from the list below): ☐ **Ed Master Plan** ☐ **Student Equity Plan** ☐ **Guided Pathways** ☐ **AB 705/1705** ☒ **Technology Plan** ☐ **Facilities Plan** ☐ **Strong Workforce** ☐ **Equal Employment Opp.** ☐ **Title V**	

New Program Planning Initiative (Objective) – Yearly Planning Only	
Title (including number:	(6) HERO13 Black + Accessories Bundle
Planning Years:	*2025-26*
Description: 3D printed parts are essential for architectural model making. Students will utilize 3D printers to produce more complex parts that cannot be produced with the laser cutter. The production of high-quality architectural designs and models are essential to the success of students in both transfer and workforce entry. *(A more detailed version of initiative. Please include a description of the initiative, why it is needed, who will be responsible, and actions that need to happen, so it is completed.)*	
What college plans are associated with this Objective? (Please select from the list below): **Ed Master Plan** **Student Equity Plan** **Guided Pathways** **AB 705/1705** **x Technology Plan** **Facilities Plan** **Strong Workforce** **Equal Employment Opp.** **Title V**	

Area of Focus Discussion Template
ENROLLMENT TRENDS AND EFFICIENCY

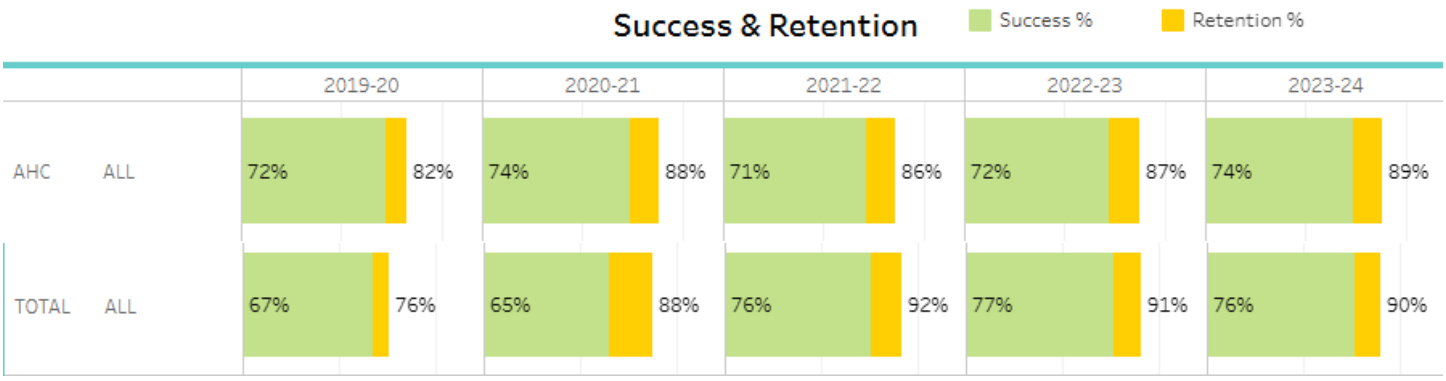
Enrollment Trends and Efficiency – look for areas of growth or decline, relationship to the college and similar programs, and head count (enrollment and full-time equivalents for students and full-time equivalents faculty). Sample activities include the following:

Possible topics:

- Review FTES, headcount and enrollment trends disaggregated by population groups.
- Assess trends in productivity.
- Review retention and success rates by modality and disaggregated by population groups.
- Analyze the throughput of students from every completion and assess time to completion and disproportionate impact.
- Collaborate with guided pathways success teams to determine if programmatic barriers exist.
- Establish program goals for success rates.

- **What data were analyzed and what were the main conclusions?**

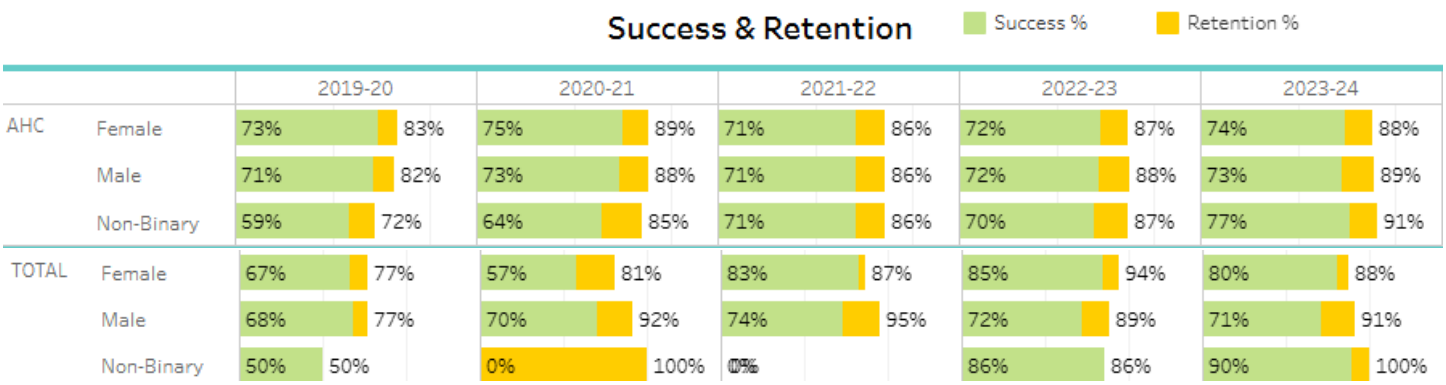
Success and Retention Rates:



Source: https://www.hancockcollege.edu/ie/Program%20Review%20Success%20Retention%20Persistence.php

The success rates of the architectural technology program (bottom bar chart) were higher than the success rates of the college over the three calendar years 2021-22 to 2023-24. In addition, the architectural technology retention rates over the same three-year period were higher than the college's retention rates.

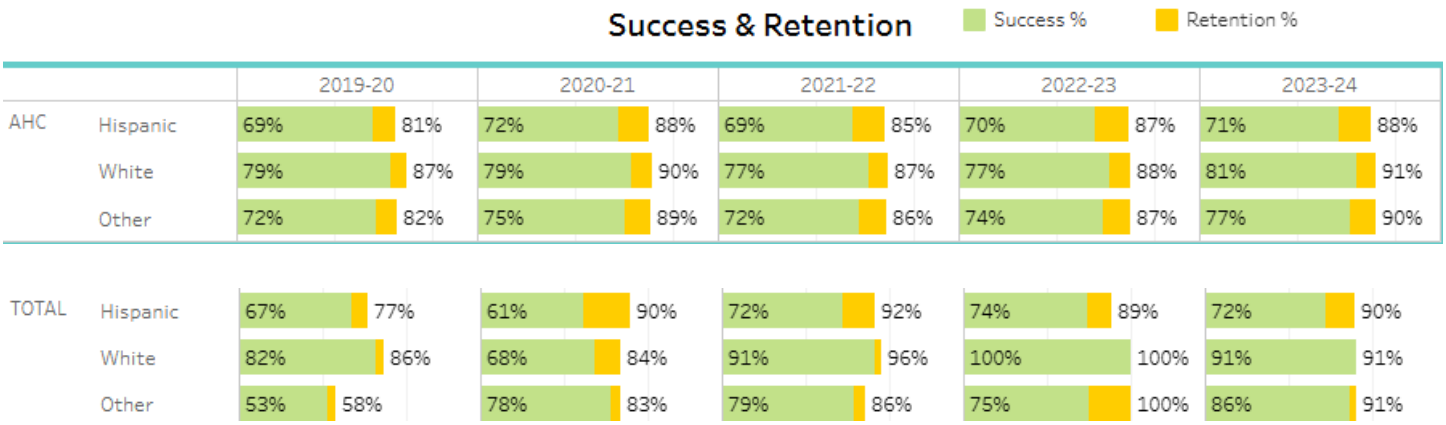
Success and Retention Rates by Gender:



Source: https://www.hancockcollege.edu/ie/Program%20Review%20Success%20Retention%20Persistence.php

The bottom bar chart shows that between 2021-22 and 2023-24 calendar years, the success rate of architectural technology female students consistently exceeded the rates of male students. Over the same three calendar year period, male students had more retention rates except for 2022-23. Furthermore, architectural technology female students' retention and success rates between 2021-22 and 2023-24 consistently exceeded or equaled AHC female retention and success rates. Between 2020-21 and 2023-24 architectural technology male students had consistently higher retention rates than the AHC male retention rates.

Success and Retention Rates by Ethnicity:



Source: https://www.hancockcollege.edu/ie/Program%20Review%20Success%20Retention%20Persistence.php

The success rates of architectural technology Hispanic students was consistently lower than that of White students (see bottom bar chart in the image above). In addition, the non-White and non-Hispanic architectural technology student population had higher success rates than Hispanic students in the last four years of the five-year calendar shown in the image above. Hispanic students, on the other hand, were closely behind White and other students in the retention rates.

When the retention rates of the architectural technology program are compared with the rates of the college from 2021-22 and 2023-24, all ethnic groups within the architectural technology program had consistently higher retention and success rates (except for one case in 2021-22 where other students' retention rate was equal)

Efficiency FTES/FTEF:

A comparison between the overall efficiency of the college and the architectural technology program efficiency shows that in the calendar years 2022-23 and 2023-24, the efficiency rates of the architectural technology program were slightly lower that the overall efficiency rate of all programs. In addition, efficiency rates during the last two years of the above five-year period show an increase over the efficiency rates of the first three years of the same five-year period.

Based on the data analysis and looking through a lens of equity, what do you perceive as *challenges* with student success or access in your area of focus?

- There is a need to enhance outreach activities and promotional materials.
- More space is needed to meet the needs for future growth.
- Limited awareness of related fields in planning, design, and construction that are offered by universities including Cal Poly SLO, Cal Poly Pomona, and New School of Architecture.
- Architecture is mainly absent in US K-12 education and, therefore, misses an early opportunity to attract potential architects-to-be.

What are your plans for change or *innovation*?

- Increase transfer-with-award rate, the rate at which students who transfer to a four-year institution within six years complete a certificate or associate degree prior to their earliest four-year-institution enrollment. Source: https://ccrc.tc.columbia.edu/tracking-transfer-state-outcomes.html
- Enhance enrollment by exploring College NOW and dual enrollment opportunities. One challenge with dual enrollment is the lack of architectural technology programs and qualified instructors at the high school level.
- Offer summer sessions in foundation courses in architectural technology to help new students get a head start.
- Increase awareness of architectural technology at the high school level through workshops conducted either at the high school or the college. The introduction to architectural technology workshops would help spark more interest in architecture and related areas such as construction management and provide incoming high school students with the opportunity to make informed decisions.
- Attract a larger proportion of existing high school graduates to pursue architectural careers. According to an article by architect Blaine Brownell titled "Architectural Crisis Ahead: The Impending Talent Shortfall and How to Overcome It:

  "*Compared with many fields of study, architecture is mainly absent in US K-12 education and, therefore, misses an early opportunity to attract potential architects-to-be*."
- Work with facilities on a master plan for O-300 replacement to include a digital fabrication lab. Fabrication labs enable students and faculty members to construct digital and physical three-dimensional scale models of urban sites, landscapes, buildings, and building components. These spaces are equipped with both digital and carpentry tools, allowing architecture and design students to fabricate and test their ideas.

  Source: Shop & Digital Fabrication Lab | School of Architecture, Planning & Preservation

How will you *measure* the results of your plans to determine if they are successful?

- Monitor enrollment, retention, and success rates. In addition, track transfer rates to architecture university programs.
- Track enrollment in the architectural technology foundation courses including ARCH 100: Computer Aided Drafting and ARCH 111: Architectural Graphics and Design I, to better assess the success of the summer outreach program. One important goal for the summer program is to increase the number of students who plan to explore the option of starting their architectural education.
- Track enrollment in advanced architectural technology courses including capstone classes ARCH 151: Architectural Design Studio I and ARCH 152: Architectural Design Studio II. Improvement in enrollment in advanced courses is an indicator of improved retention

Validation for Program Planning Process: If you have chosen to do the Validation this year, please explain your process and the findings.

1. Who have you identified to validate your findings? (Could include Guided Pathway Success Teams, Advisory Committee Members, related faculty, industry partners or higher education partners)

Advisory committee members and related faculty.

2. Are there specific recommendations regarding the core topic responses from the validation team?

- There is a need to enhance outreach activities and promotional materials.
- More space is needed to meet the needs for future growth.
- Limited awareness of related fields in planning, design, and construction that are offered by universities including Cal Poly SLO, Cal Poly Pomona, and New School of Architecture.
- Architecture is mainly absent in US K-12 education and, therefore, misses an early opportunity to attract potential architects-to-be.

Based on the narratives for the prompts above, what are some program planning initiatives and resources needed for the upcoming years? Use the tables below to fill in **NEW** resources and planning initiatives. ***This section is only used if there are new planning initiatives and resources requested that pertain to the Core Topic only.***

Resource Requests: Please use the Resource Request Excel template located on the Program Review web page to enter resource requests for equipment, supplies, staffing, facilities, and misc. resources needed. Send completed excel document along with completed program view core topic for signature.

New Program Planning Initiative (Objective) – Core Topic Only	
Title (including number:	A new fabrication lab to accommodate future growth and to facilitate the production of architectural models and prototypes.
Planning years:	*2025-26 to 2028-29*
Description: *(A more detailed version of initiative. Please include a description of the initiative, why it is needed, who will be responsible, and actions that need to happen, so it is completed.)*	
What college plans are associated with this Objective? (Please select from the list below): ☐ **Ed Master Plan** ☐ **Student Equity Plan** ☐ **Guided Pathways** ☐ **AB 705/1705** ☐ **Technology Plan** ☒ **Facilities Plan** ☐ **Strong Workforce** ☐ **Equal Employment Opp.** ☐ **Title V**	

Program Review Signature Page:

Saad Sadig — 05/22/2025

Program Review Lead _____ Date

Thomas Lamica — 06/17/2025
Thomas Lamica (Jun 17, 2025 10:26 PDT)

Program Dean _____ Date

_____ _____

Vice President, Academic Affairs _____ Date

ARCH Program Review_2024-25_enrollment trends & efficiency

Final Audit Report 2025-07-17

Created:	2025-05-21
By:	Kara Mushegan (kara.mushegan@hancockcollege.edu)
Status:	Signed
Transaction ID:	CBJCHBCAABAAW-8w5deohrdpN37ctOROUtygerJum3PF

"ARCH Program Review_2024-25_enrollment trends & efficiency " History

Document created by Kara Mushegan (kara.mushegan@hancockcollege.edu)
2025-05-21 - 6:47:01 PM GMT- IP address: 209.129.94.61

Document emailed to saad sadig (ssadig@hancockcollege.edu) for signature
2025-05-21 - 6:48:09 PM GMT

Email viewed by saad sadig (ssadig@hancockcollege.edu)
2025-05-22 - 4:41:46 PM GMT- IP address: 73.189.230.209

Document e-signed by saad sadig (ssadig@hancockcollege.edu)
Signature Date: 2025-05-22 - 4:42:25 PM GMT - Time Source: server- IP address: 73.189.230.209

Document emailed to Thomas Lamica (thomas.lamica@hancockcollege.edu) for signature
2025-05-22 - 4:42:27 PM GMT

Email viewed by Thomas Lamica (thomas.lamica@hancockcollege.edu)
2025-05-22 - 5:00:35 PM GMT- IP address: 104.47.58.126

Document e-signed by Thomas Lamica (thomas.lamica@hancockcollege.edu)
Signature Date: 2025-06-17 - 5:26:59 PM GMT - Time Source: server- IP address: 209.129.94.61

Document emailed to Robert Curry (rcurry@hancockcollege.edu) for signature
2025-06-17 - 5:27:00 PM GMT

Email viewed by Robert Curry (rcurry@hancockcollege.edu)
2025-06-17 - 5:45:14 PM GMT- IP address: 104.47.55.126

Document e-signed by Robert Curry (rcurry@hancockcollege.edu)
Signature Date: 2025-07-17 - 10:31:57 PM GMT - Time Source: server- IP address: 104.28.124.173

Agreement completed.

2025-07-17 - 10:31:57 PM GMT