CURRENT YEAR: 2017-2018 PROGRAM: ARCHITECTURE

CLUSTER: WORKFORCE & ECONOMIC DEVELOPMENT

LAST YEAR CPPR COMPLETED: 2014

NEXT SCHEDULED CPPR: 2018 CURRENT DATE: 3/3/2017

The Annual Program Planning Worksheet (APPW) is the process for:

- reviewing, analyzing and assessing programs on an annual basis
- documenting relevant program changes, trends, and plans for the upcoming year
- identifying program needs, if any, that will become part of the program's resource plan
- highlighting specific program accomplishments and updates since last year's APPW
- tracking progress on a Program Sustainability Plan if established previously.

Note: Degrees and/or certificates for the <u>same</u> program <u>may be consolidated</u> into one APPW.

This APPW encompasses the following degrees and/or certificates:

A.S. in Architectural Technology

GENERAL PROGRAM UPDATE

Describe significant changes, if any, to program mission, purpose or direction. *If there are not any, indicate: NONE.*NONE

PROGRAM SUSTAINABILITY PLAN UPDATE

Was a Program Sustainability Plan established in your program's most recent Comprehensive Program Plan and Review
Yes \square If yes, please complete the Program Sustainability Plan Progress Report below.
No ⊠ If no, you do not need to complete a Progress Report.

If you selected yes, please complete the Program Sustainability Plan Progress Report below after you complete the Data Analysis section. That data collection and analysis will help you to update, if necessary, your Program Sustainability Plan.

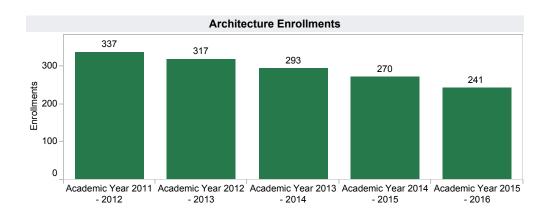
DATA ANALYSIS AND PROGRAM-SPECIFIC MEASUREMENTS

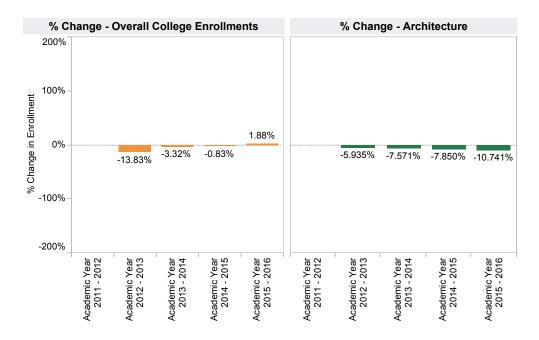
In addition to other data that is relevant to your program, institutional program data is available on the <u>SLOCCCD</u> <u>Institutional Research and Assessment Program Review Data Dashboard site.</u> Please paste the charts into this document, and respond to the prompts for each data element. Please also comment on your program's data and how it compares to the overall college data. Take time to work with your faculty to review the disaggregated data. Several measures can be "drilled down" to reveal differentiated results based on location, modality, ethnicity, age, gender and so on. This disaggregated data can reveal a great deal about your program's effectiveness.

Note: Your responses to the prompts for the data elements below should be for the entire program. If this APPW is for multiple degrees and/or certificates then you MAY want to comment on each degree and/or certificate, or discuss them holistically for the entire program being sure to highlight relevant trends for particular degrees and/or certificates, if necessary.

SLOCCCD Program Review Data - Enrollment

Department: Course: Architecture All





Enrollment: Duplicated count of students who completed greater than 0 units in positive attendance courses or were present on census for all other accounting methods.

Enrollment

The program-specific institutional data for AY2015–16 shows that Architecture enrollments declined 10.74% from the previous year and 10.6% since 2012–13. In comparison, overall college enrollment for AY2015–16 registered modest increases of 1.9% over the previous year and 1.0% since 2012–13. Over the last five years, the Architecture program and overall college registered enrollment declines of, respectively 28.5% and 15.8%.

The five-year period bracketed in the institutional data began with the College in dire financial and accreditation crises and ended with the institution stabilized, reaccredited, and on a path of modest growth. While the Architecture program shared the College's downward spiral and return to relative stability, it has yet to partake in the College's recent growth, however slight. It will be interesting to see how the trends look when those troubled times fall outside the five-year data range, as they soon will.

The architecture profession, which contracted dramatically during the recession and struggled through subsequent years of anemic recovery, has stabilized and returned to growth. We would expect program enrollments to track with the profession, stabilizing and gradually growing, while not returning to its 2008 peak anytime soon. Historically, academic enrollments in architecture lag behind shifts in the economic fortunes of the profession, be they up or down.

Enrollments in all of Cuesta's programs, including Architecture, are affected somewhat by public perception of our school as a reliable place to pursue an education. In this regard, the College has been steadily restoring its reputation, but County demographic trends do not augur for significant growth over the next ten years.

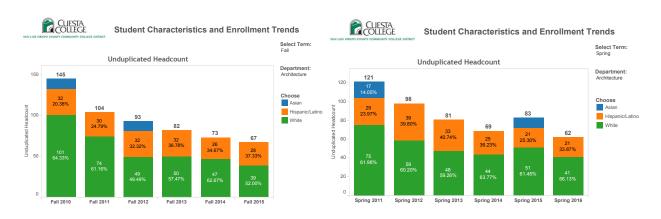
Programs such as Architecture typically attract a higher percentage of out-of-area students than those focused on GE, precisely because we remain the only CCC Architecture program enjoying full two-year articulation with Cal Poly's B.Arch. program. Although more local students may be accessing our program because of the Promise grants, we are most likely seeing far less of a boost from Promise than the College as a whole. We also speculate that the high cost of housing in and around San Luis Obispo might be deterring prospective students from attending Cuesta, though we do not have any data that would support this assertion.

Finally, while dual enrollment has contributed to the College's recent modest growth, this is not an appropriate option for Architecture; it is not what high school students should be doing with their secondary education.

Section IV of this report, Program Development/Forecasting, of this report describes the planned action steps to improve enrollment issues.

One strategy we implemented for Spring 2016 was to hold our LEED preparation courses at Cal Poly, where we saw an opportunity to pick up additional students who would be less inclined to come out to Cuesta's campus for these specialized courses, Arch 245 and 246. This seemed to work well for a semester, but demand appears to have collapsed for 2016–17, and we ended up cancelling those courses due to low enrollment. Their future remains uncertain.

Architecture's enrollments have been fluctuating between fall and spring, with the former generally stronger. Overall, we have expected enrollments to remain fairly stable and have been hoping to return to modest growth. This has not occurred in any way we can yet regard as decisive. Fall 2016 looked better than the previous year, but this is not included in the program data on which this report is based. Spring 2017 appears to be worse. The five-year trend, therefore, show continued decline, although there was a significant uptick in spring 2015.



For AY2015–16, the most recent year for which institutional data is available, the Architecture program's demographic breakdown by ethnicity tracks very well the College overall and with 2015 census data for San Luis Obispo County (2011–2015 American Community Survey).

Consistent with Cuesta's designation as a Hispanic-serving institution, students classified as "Hispanic/Latino" comprised 37.33% of Architecture's fall enrollment, which exceeds the 32.38% share of the College's enrollment, and exceeds by far the 21.8% share of the County's population. Over the five-year period 2010–15, the *percentage* of Hispanic/Latino students in the Architecture program increased by 83%.

The percentage of Asian students in Architecture has fluctuated, but like the College, it has generally matched their representation in the County's population.

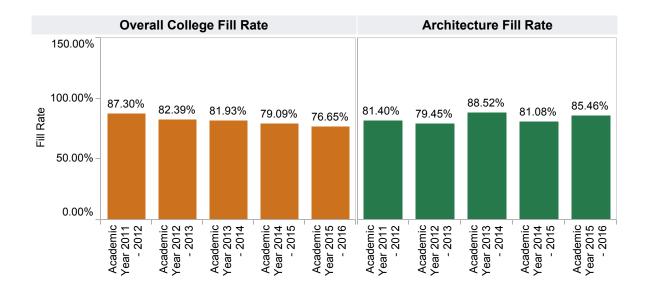
Clearly, Cuesta's Architecture program is fulfilling is mission of expanding opportunity to ethnic groups that have been traditionally underrepresented in this profession. We take pride in this success, as it goes straight to the core of Cuesta's mission.

Student Demand (Fill Rate)

Architecture's fill rates generally have continued to improve and over the last three years have exceeded the overall College fill rates by a significant margin. Save for a slight dip in AY2012–13, the ratio of enrollments to class limits has remained above 80%, peaking at 88.52% in 2013–2014. Though the program's fill rate dipped slightly, to 81.08% in 2014–2015, it rebounded to 85.46% in this most reason year, matching predictions ventured in last year's APPW. Although official data for 2016–2017 has yet to be released, an unofficial review of recent enrollment reports suggests that Architecture's fill rates have declined this year. Fill rates for Spring 2017 are generally weak, though it must be noted that rates for College overall were even worse.

SLOCCCD Program Review Data - Student Demand (Fill Rate)

Department: Course: Architecture All



Fill Rate: The ratio of enrollments to class limits. Cross listed class limits are adjusted appropriately.

Also, courses with zero class limits are excluded from this measure.

Ever mindful of the need to optimize enrollments, we Architecture faculty have moved aggressively to address fill rates and efficiency by consolidating sections and cancelling classes that are severely under-enrolled, except where doing so would jeopardize students' ability to complete degree and transfer requirements.

Arch 205 has historically had the lowest demand, and the Fall 2015 class was cancelled due to extremely low enrollment. It did run with a low enrollment in Fall 2016, because it had not been offered in a while.

Demand for other courses has been generally high, though variable from year to year. Usually our highest-enrolled course, with fill rates typically above 90%, Arch 201 saw softer demand in Spring 2016. After a strong rebound in Fall 2016, when the course was overenrolled, the current semester is again low.

The first-year design sequence, Arch 221 and 222, has generally remained strong year over year. Although the latter course dipped last year, it is currently more than full.

Second-year design, Arch 251 and 252, normally are similarly strong, although the latter is unusually low in the current semester.

A possible explanation for some of the more atypical fluctuations in course enrollments may be that growing numbers of students appear to be taking less direct, linear paths through the program. They do not necessarily leave for good; rather, some disappear for a semester or two to buttress their finances, tackle GE courses, or remediate deficiencies and then return. These erratic paths are often difficult to anticipate, despite our best efforts to track who is in the pipeline at any given time and plan ahead. We routinely advise students that following the program's flow chart as closely as possible is desirable.

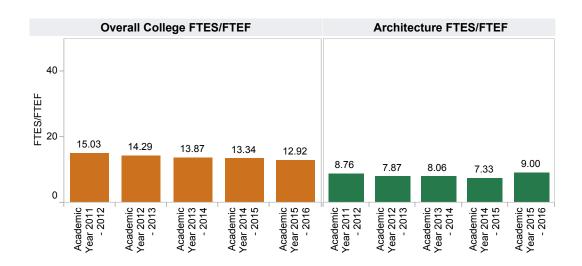


Fill Rate: The ratio of enrollments to class limits. Cross listed class limits are adjusted appropriately

Efficiency (FTES/FTEF)

SLOCCCD Program Review Data - Efficiency (FTES/FTEF)

Department: Course: Architecture All



FTES/FTEF: The ratio of total FTES to Full-Time Equivalent Faculty (SXD4 Total-Hours/17.5)/XE03 FACULTY-ASSIGNMENT-FTE)

FTES/FTEF over the last five years has fluctuated between roughly 8.76% and 9.00%, well below the College's target for all programs. It must be stated here that the distinctive teaching modality that characterizes the core of architectural pedagogy *the world over* makes these programs inherently less efficient. Nevertheless, this issue is of great concern to the Architecture faculty, who have responded by moving aggressively to consolidate sections and cancelling undersubscribed courses recent years. That said, we are locked into offering the courses stipulated in our articulation agreements; consequently, our degree pattern and transfer courses—most of them—remain sacred.

While we improved our efficiency significantly for 2015–16, we have lost some ground in this current academic year. According to the daily reports generated from the "Enrollment Management" page of the College's Web site on February 26, 2017, efficiency for Fall 2016 fell to 8.17 FTES/FTEF, down from 9.71 the previous fall. Similarly, and echoing the College as a whole, efficiency for Spring 2017 dropped to 7.64 FTES/FTEF, down from 8.22 for last spring.¹

There are two basic strategies for improving efficiency. One, obviously, is by increasing enrollments in the courses we already teach; the other is by introducing a larger lecture or distance education course whose efficiency would offset the less efficient studio/lab courses. We are in the process of modestly increasing our enrollment limits in a number of our courses to help efficiencies, but this may well exact a price in terms of student success. We continue to explore how we might add a higher efficiency course that could offset the inherent inefficiencies of our core offerings.

To boost enrollments, Architecture faculty have intensified their outreach and marketing efforts, and they have also been working to broaden the program's articulation agreements with architecture schools in other parts of

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¹ http://www.cuesta.edu/aboutcc/planning/research/Enrollment_Management.html

the state. Over the past year, we have tabled at Cuesta's own College night and recent Career Exploration fair and visited local high schools. In Fall 2015, we updated our articulation agreement with NewSchool of Architecture and Design; and we recently concluded a new articulation agreement with Woodbury University. While our transfer agreement with Cal Poly remains the main driver of our program, these newer agreements make Cuesta's Architecture program even more attractive to prospective students. Moreover, our name appears on their websites, which helps make out-of-area students aware of what Cuesta offers.

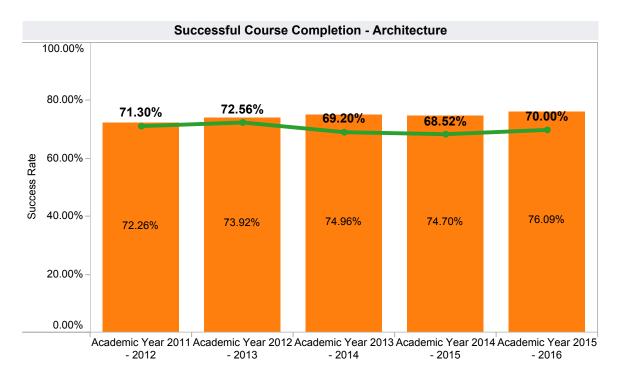
Whatever we do, enrollments in an open-admission, low cost community college programs will always fluctuate from semester to semester, and Architecture is certainly no exception to this reality.

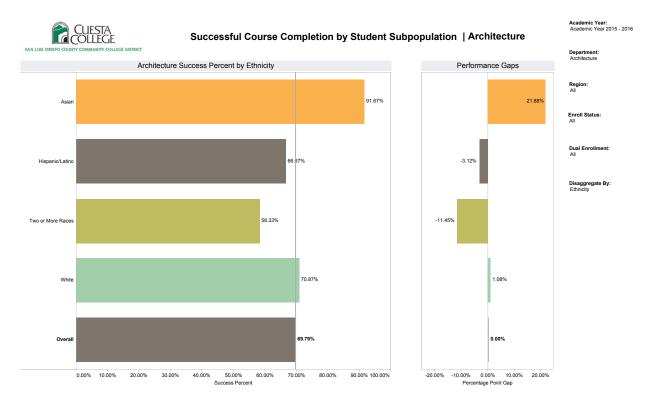
In short, Architecture faculty are well aware of the efficiency challenges and anything but sanguine about them. The program will never be a leader in efficiency, but there is certainly room for improvement.

Student Success

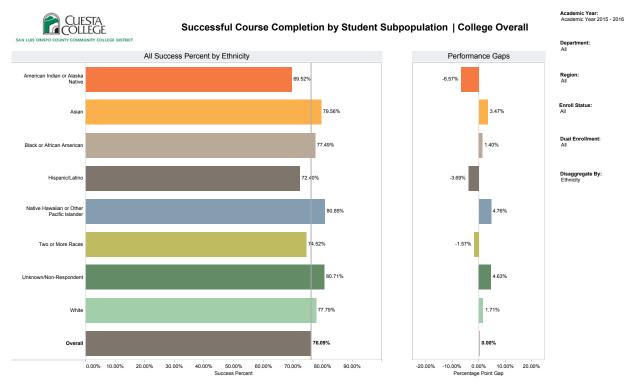
Architecture's rate of successful course completion tracks pretty well with the overall College success rate. This is a very demanding program within an open-admission college, one that prepares students for fields that are highly competitive. Over the last five years, the program's success rates have remained within approximately 6 percentage points of those for the College as a whole, and the gap between them has sometimes narrowed to the point of insignificance. As with other metrics, this, too, will fluctuate from year to year. It should also be noted that even small fluctuations within a relatively small program will be magnified when reported as a percentage.







Note: Successful Course Completion is the ratio of enrollments resulting in a final grade of A, A-, B+, B, B-, C+, C, CR or P to all valid grades.



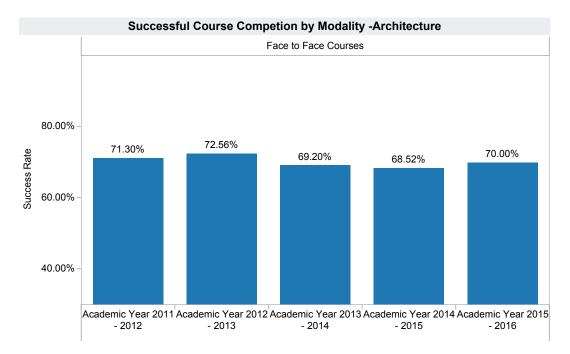
Note: Successful Course Completion is the ratio of enrollments resulting in a final grade of A, A-, B+, B, B-, C+, C, CR or P to all valid grades.

Source: MIS referential files fortified with local Banner data

The charts on the preceding page compare disaggregated success rates by ethnicity for both the Architecture program and for the College overall. Though relatively small in numbers, Asian students studying architecture exceed by far the performance of all other ethnic groups, completing at much higher rates in this major than in the College overall. The performance gap for Hispanic/Latino students studying architecture is slightly better (less negative) than for the College as a whole.

Successful Course Completion

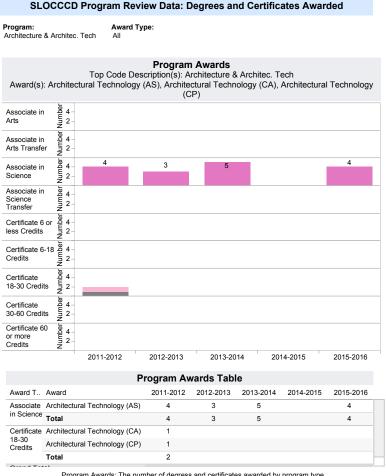




All of the Architecture program's courses are taught face to face. As the data chart above indicates, success rates have fluctuated modestly from year to year. It is interesting to compare success rates in a particular year with the program's respective fill rates, from which one may infer a correlation between student success and class size.

Over the last five years, for example, AY2012–13 had the highest success rate (72.56%) and the lowest fill rate (79.45%). (See chart on page 4.) One reason for this could be that smaller enrollments, hence class sizes, in a studio-based program translate into increased contact time with each student; consequently, it would be reasonable to expect smaller classes to produce superior results, efficiency issues notwithstanding.

Historically, success rates in many of our courses have been higher in the spring. This is likely because all but the most basic courses are populated by students who had succeeded the previous fall and persisted, a process of natural selection, so to speak. Most spring courses are sequels to fall offerings, so more of those students would have reaffirmed their interest by virtue of continuing. Success and retention generally improve as courses become more advanced.



Program Awards: The number of degress and certificates awarded by program type

Degrees and Certificates Awarded

Data regarding university transfers is not included in the SLOCCCD Institutional Research and Assessment Program Review Data. However, transfer rates to Cal Poly have remained strong. We consistently send over 50% of Cal Poly Architecture transfer students. Last year, roughly 90% of our qualified second year students who applied to Cal Poly were admitted to their Architecture program. Small numbers of our students transfer to other B.Arch. programs, including NewSchool and Woodbury.

In response to the lack of awarded degrees and certificates, we discontinued the Certificate of Proficiency in 2012 and worked with counseling to redesign the A.S. degree path to ensure that all qualified transfer students meet the requirements for the degree. The A.S. degree change was forwarded to the Chancellor's Office for approval in Fall 2013, and we did see the expected jump in "completers" in Spring 2014. While no one applied to receive the degree in 2015, program awards rebounded last year.

While program faculty do actively encourage students to apply for the degree, many show little interest; those who have been admitted to B.Arch. programs have achieved their goal and see the A.S. as irrelevant. Beyond exhortation, the only remaining option for increasing the number of official "completers" would be to compel students to declare Architecture as their major and apply for the degree. Doing so may have other implications, however, assuming it is even administratively possible.

OTHER RELEVANT PROGRAM DATA (OPTIONAL)

Please provide and comment on any other data that is relevant to your program such as State or National certification/licensure exam results, employment data, etc. If necessary, describe origin and/or data collection methods used.

PROGRAM OUTCOMES ASSESSMENT AND IMPROVEMENTS CHECKLIST AND NARRATIVE

CHECKLIST:

\boxtimes	SLO assessment cycle calendar is up to date:
\boxtimes	Date SLO assessment cycle calendar was last updated: 8/20/2016
\boxtimes	All courses scheduled for assessment have been assessed in eLumen
\boxtimes	Dates of last completed course assessments in eLumen: 3/1/2017
	Program Sustainability Plan progress report completed

Narrative:

NONE

Briefly describe program changes, if any, which have been implemented in the previous year as a direct result of the Program or Student Services Learning Outcomes Assessment. If no program changes have been made as results of Program or Student Services Learning Outcomes Assessment, indicate: NONE.

PROGRAM PLANNING / FORECASTING FOR THE NEXT ACADEMIC YEAR

Briefly describe any program plans for the upcoming academic year. These may include, but are not limited to the following: (Note: you do not need to respond to each of the items below). If there are no forecasted plans for the program, for the upcoming year, indicate: NONE.

- A. New or modified plans for achieving program learning outcomes.
- B. Anticipated changes in curriculum, scheduling or delivery modality
- C. Levels, delivery or types of services
- D. Facilities changes
- E. Staffing projections
- F. Other

For the year 2017-18 Architecture is forecasting the following recourses outlined in our APPW.

- Upgrade drafting tables and chairs in 4115.
- Replace data projectors and instructor stations in 4115 and 4116.
- Fund software purchases and upgrades.
- Upgrade the computer lab in room 3406
- New faculty office computers.

- Funding support of off campus field trips.
- Fund annual ACSA, AIA and USGBC membership fees. Funding for membership in the Coalition of Community College Architecture Programs (CCCAP).
- Support and funding for out of state professional development opportunities such as the AIA national convention and Autodesk's national convention.
- Funding for a new Digital Fabrication Shop. Ongoing funding for outside hosting of CuestArc's website.

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PROGRAM SUSTAINABILITY PLAN PROGRESS REPORT

This section only needs to be completed if a program has an existing Program Sustainability Plan. Please indicate whether objectives established in your Program Sustainability Plan have been addressed or not, and if improvement targets have been met.

Area of Decline or Challenge	Identified Objective (Paste from PSP)	Planning Steps (Check all that apply)	Has the Improvement Target Been Met?
		□ Identified	
Enrollment		☐ Resources Allocated	Select one
		☐ Implemented	
		☐ Identified	
Student Demand (Fill Rate)		☐ Resources Allocated	Select one
		☐ Implemented	
		☐ Identified	
Efficiency (FTES/FTEF)		☐ Resources Allocated	Select one
		☐ Implemented	
		☐ Identified	
Student Success – Course Completion		☐ Resources Allocated	Select one
		☐ Implemented	
		☐ Identified	
Student Success— Course Modality		☐ Resources Allocated	Select one
,		☐ Implemented	

Degrees and		☐ Identified	
Certificates		\square Resources Allocated	Select one
Awarded	rded	\square Implemented	

If Program Sustainability Plan is still necessary, provide a brief description of how you plan to continue your PSP and update your PSP to remove any objectives that have been addressed and include any new objectives that are needed.

SURVEY

Thanks,

Please take 15 minutes to complete the IPPR Survey. Your assessment will serve to help us make the
form and process better.

The IPPR Committee

Survey Link