INSTRUCTIONAL COMPREHENSIVE PROGRAM PLANNING AND REVIEW (CPPR) FOR 2018

Only to be completed by those programs scheduled for the year according to the institutional comprehensive planning cycle for instructional programs (i.e., every four years for CTE programs and five years for all other instructional programs), which is produced by the Office of Academic Affairs. Faculty should meet with their dean prior to beginning this process. Training is available to support faculty completing this work.

Cluster: WED **Program:** Architecture **Current Academic Year:** 2017-2018

Last Academic Year CPPR Completed: 2014 **Current Date:** 03/06/2018

NARRATIVE: INSTRUCTIONAL CPPR

Please use the following narrative outline:

I. GENERAL PROGRAM INFORMATION

A. PROGRAM MISSION (OPTIONAL)

The architecture program at Cuesta College, prepares individuals for challenging careers in the architecture profession and its related design and technical fields. An acknowledged leader in architectural education among California's community colleges, Cuesta's program strives to offer its students the best foundation for transferring to a university program or entering the workforce.

B. BRIEF HISTORY OF THE PROGRAM

From modest beginnings two decades ago, the architecture program has grown steadily to its present position as one of California's premier community college architecture programs. Our program developed as an offshoot of the Construction Technology program, when, in 1994, several architecture professors from Cal Poly began offering some of their lower division courses at Cuesta. Their aim was to provide greater access to basic architectural training for students in our community, the opportunity to earn a certificate in architectural drafting or an associate's degree in Architectural Technology, and, for the most gifted, a path to university transfer with advanced standing, most specifically to Cal Poly.

During the 1998-1999 academic year, David Fernandez was hired as the program's first lead instructor. Under his leadership, the program expanded its offerings to include equivalent and transferable second courses to Cal Poly's architecture program. In the spring of 2001. Cal Poly recognized Cuesta as the only California Community College with equivalent first- and second-year architecture courses. Cal Poly granted us "Certified Articulation" status and began admitting our qualified students into the third year of their program.

Beginning with the 2001–2002 academic year, architecture gained recognition as a separate program within the Engineering and Technology division, a change signified by the adoption

of the "ARCH" designation for its course numbers — up to that point, they had been listed as "CTECH."

The next major milestone for Cuesta came in 2002, when David Fernandez was hired as Cuesta's first full-time architecture instructor. Under his tenure, the program has continued to develop, attracting more students, strengthening ties to universities, and forging stronger relationships to the profession. In 2007, Cuesta became an affiliate member of the Association of Collegiate Schools of Architecture (ACSA), which is the national organization of all accredited professional degree programs for architecture. In the following year, Bruce Silverberg joined Mr. Fernandez as the program's second full-time faculty member.

In 2009, the architecture program launched a new Web site aimed at strengthening outreach to high school and other prospective students. This effort included a rebranding of the program as "CuestArc: Architecture at Cuesta College," a shift that reflects the program's design focus and differentiates it from community college programs that are solely vocationally oriented. In August 2017, Cuesta retired the server that hosted the Architecture website, causing us to lose one of our most important marketing tools.

In 2010, the program added a second articulation agreement, with NewSchool of Architecture and Design, which essentially matched the one with Cal Poly. A third agreement, with Woodbury University, followed in 2016.

C. INCLUDE SIGNIFICANT CHANGES/IMPROVEMENTS SINCE THE LAST PROGRAM REVIEW

The 2014 Program Review chronicled the dramatic declines in enrollment from the multiple crises that had engulfed both the College and the architecture program, not to mention the economic recession that had decimated the architectural profession. Over the past four years, architecture enrollments have continued to decline, though at levels well below the horrific losses seen in 2009 and 2010. The trends have generally paralleled those for the College as a whole.

In analyzing the architecture program's enrollment trends, it is important to view this in relation to enrollments at Cal Poly's College of Architecture and Environmental Design (CAED), and to the leading indicator of economic health for the architectural profession.

Figure 1 on the following page illustrates these trends.

Data reported in the *Cal Poly Fact Book* indicates parallel enrollment declines at both Cuesta and Cal Poly between 2008 and 2012. Cal Poly university and CAED enrollments had peaked in September 2008, while our program peaked the following year, in August 2009. After 2012, however, the trends diverged. CAED freshman and transfer enrollments rebounded sharply for 2013, while Cuesta's architecture enrollments continued to decline, albeit at a slower rate than the horrific contractions of 2010 and 2011.

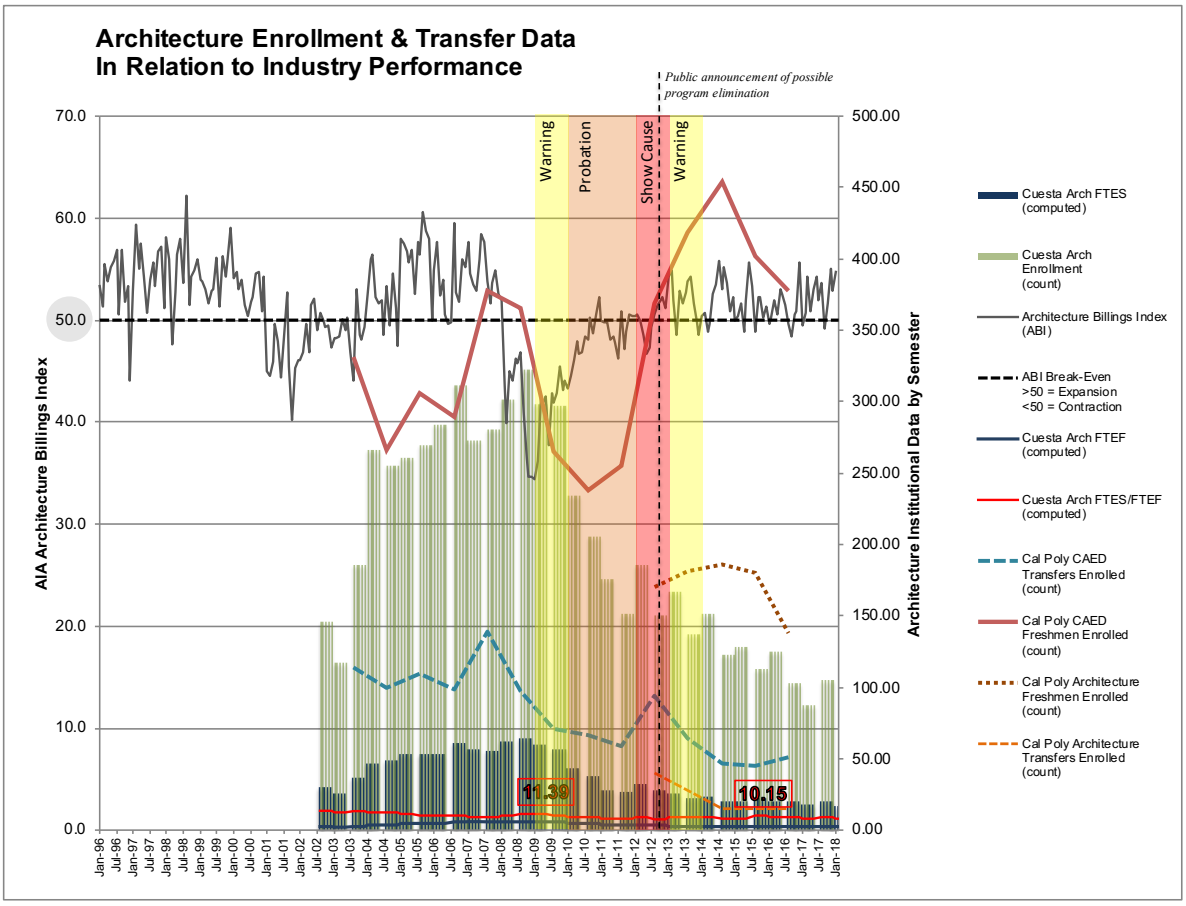
To consider how our program enrollments might relate to broader economic trends within the architectural profession, we turn to the AIA Architectural Billings Index (ABI), which offers the most reliable measure of architecture/building industry expansion and contraction. In January 2009, the ABI had dropped to a low of 35 points. Following suit, a year later our architecture enrollments began to fall. It was not until 2013 that the

profession really returned to solid growth. Among other possible factors, we can certainly speculate the the economic vicissitudes of the profession influence how potential students weigh their prospective career paths.

Until 2012, when the College was placed on "show cause," architecture's program data tracked quite closely with both the industry and Cal Poly's transfer admissions, with only slight time lags as the student market absorbed and reacted to industry conditions. From 2013 on, however, the trends diverged, with Cuesta's architecture enrollments in decline as Cal Poly and the profession (industry) returned to growth mode. It is this divergence that remains striking.

In spite of these factors, the core of the architecture program remains in place. With our full two-year articulation with Cal Poly, the number-two-ranked undergraduate architecture school in the nation for 2017–18, Cuesta retains a privileged position among California community college architecture programs. The success rate for Cuesta architecture students transfering to Cal Poly and other universities remains very high, and nearly all who complete our sequence continue to be accepted as third-year students.

Figure 1: Architecture Enrollments in Relation to Industry and Transfer Data



In 2016, in support of our university-bound students, we made permanent a short course that had been offered experimentally for several years. Now known as Arch 180, the course is titled "Architectural Portfolio Design Workshop" and is offered at the beginning of every spring semester, just when most students are preparing their design portfolios for their university applications.

Also in 2016, we updated our existing NewSchool articulation and added a similar transfer agreement with Woodbury University.

The Architecture/Engineering CAD lab recently underwent yet another round of hardware and software upgrades in Fall 2017. It must be noted, however, that remaining current in the everchanging world of digital technology means that even those improvements are reaching obsolescence; consequently, the program needs to continually plan and gather resources for the next round of replacements and upgrades.

Although enrollment is the program's most pressing current challenge, some longstanding issues with its instructional facilities remain unaddressed.

- The studio facilities the architecture program occupies remain woefully inadequate. Architecture students are asked to spend up to four-and-a-half hours at a time trying to work productively in classrooms that are nothing more than hermetically sealed boxes, windowless and poorly ventilated. The existing fluorescent lighting, while evenly distributed, remains poorly suited to hand drafting or model building; moreover, the lighting in Room 4115 still cannot be properly dimmed to allow students to take notes or work along with the instructor during digitally projected lectures and demonstrations—this has already been addressed in 4116.
- Classroom storage remains inadequate, and what does exist is poorly configured. Students have no place on campus where they can store model making tools and supplies for use in class, let alone any other books and reference materials they might use for their projects, especially in second-year; consequently, many find it easier to leave everything set up at home, rather than lug it all to school and attempt to work for several hours in poor, overcrowded space. The result is that students frequently fail to use studio time to best advantage.
- The program currently lacks workshop facilities that would allow students to do much significant hands-on construction or modeling using power tools. Students used to have limited access to an excellent woodshop nearby, but this was dismantled roughly nine years ago, when Cuesta's woodworking program was eliminated. We have arranged limited access to the scene shop in the CPAC for students in one model making course, but it is limited and insufficient. The lack of such experience is one deficiency students transferring to Cal Poly must remediate once they arrive in university.
- Although one three-dimensional printer was recently installed in Room 3406, the architecture program otherwise lacks any equipment or facilities for digital fabrication, such as three-dimensional printing, CNC milling, laser cutting, and so on. As enrollments and budgets permit, we would hope to address these limitations,

perhaps as part of a shared "makerspace" that could be staffed and utilized by several compatible College programs.

In conclusion, Cuesta's architecture students need to work productively in both analog and digital media, and the program's existing, windowless facilities are inadequate for either. The quality of our program would certainly improve with better facilities, and our second-year students would benefit from extended lab and studio access. In the ideal situation, we would even provide our students with the kind of 24/7 dedicated workspace their counterparts enjoy in university. While the last may never be feasible at a community college, on community college tuition—which is not to suggest that we should not explore it—it is nevertheless time to begin planning seriously for upgraded and expanded facilities, new and/or renovated, for Cuesta's architecture program.

D. LIST CURRENT FACULTY, INCLUDING PART-TIME FACULTY

Full-Time, Tenured

- David Fernandez, AIA (California)
- Bruce Silverberg, RA (New York and Massachusetts)

Part-Time

- None

E. DESCRIBE HOW THE PROGRAM REVIEW WAS CONDUCTED AND WHO WAS INVOLVED

The program review was conducted by Cuesta's full-time architecture faculty: David Fernandez and Bruce Silverberg.

We also thank the Cuesta Architecture Advisory Committee for their gracious input and guidance:

- Ron Baers, Architect (Retired)
- Chuck Crotser, AIA—Lecturer (Retired), Cal Poly Architecture
- Mark Dariz, RA—Design Solutions
- Jim Duffy, RA—Ten Over Studio
- Tim Fay—Educator, SLOHS
- Randy Fiser—Educator, Arroyo Grande High School
- Heidi Gibson, AIA—Studio-2g
- Laura Gough, AIA—Studio-2g
- Todd Hansen, RA—RRM Design
- Scott Mann—Studio 2g Architects and AIA Board
- Scott Martin, AIA—Architect RRM Design
- JoAnn Moore—Lecturer, Cal Poly Architecture
- George Pudlo, AIA—Cuesta College Foundation Board
- Frank Seiple, AIA—Fraser Seiple Architects
- Thomas Shorey—Sr. Architectural Designer and Cuesta alumnus
- Brian Starr, AIA—SDG Architecture
- Greg Wynn, AIA—Wynn Architecture, Cal Poly lecturer

II. PROGRAM SUPPORT OF DISTRICT'S MISSION STATEMENT, INSTITUTIONAL GOALS, INSTITUTIONAL OBJECTIVES, AND/OR INSTITUTIONAL LEARNING OUTCOMES

A. IDENTIFY HOW YOUR PROGRAM ADDRESSES OR HELPS TO ACHIEVE THE DISTRICT'S MISSION STATEMENT.

Cuesta's architecture program fully supports the College's strategic plan and trustee's goals. The program promotes self-actualization, critical thinking and creative problem solving, equal opportunity and diversity

B. IDENTIFY HOW YOUR PROGRAM ADDRESSES OR HELPS TO ACHIEVE THE DISTRICT'S INSTITUTIONAL GOALS AND OBJECTIVES, AND/OR OPERATIONAL PLANNING INITIATIVES.

The architecture program's articulation with both first *and* second years of professional degree programs at Cal Poly, Woodbury University, and NewSchool of Architecture and Design attests to its success, and to the success of our deserving students.

C. IDENTIFY HOW YOUR PROGRAM HELPS STUDENTS ACHIEVE INSTITUTIONAL LEARNING OUTCOMES.

The architecture curriculum aligns with the Institutional Learning Outcomes by teaching students to:

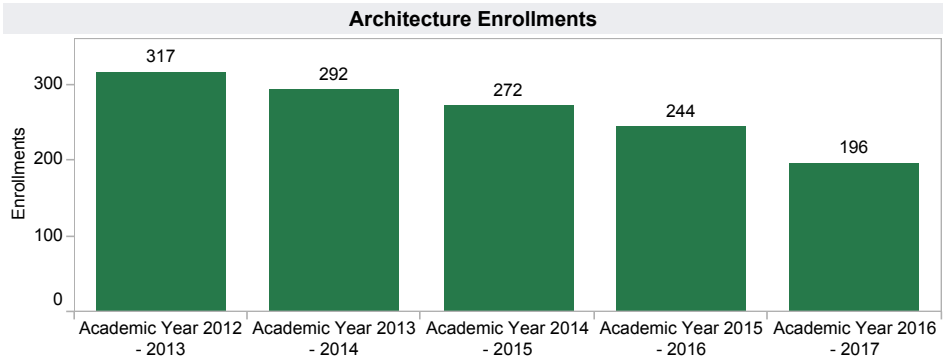
- Apply fundamental principles of architectural design theory and practice
- Advance/articulate completed course work towards university transfer into 4- or 5-year architecture programs or related majors
- Apply the principles of design communication as they apply to architectural project delivery.
- Demonstrate the skills, practical knowledge, personal motivation and professionalism, necessary to make a positive contribution to the field of architecture.
- Develop capacity for independent research and investigation
- Develop capacity to appraise and discuss architecture with sophistication

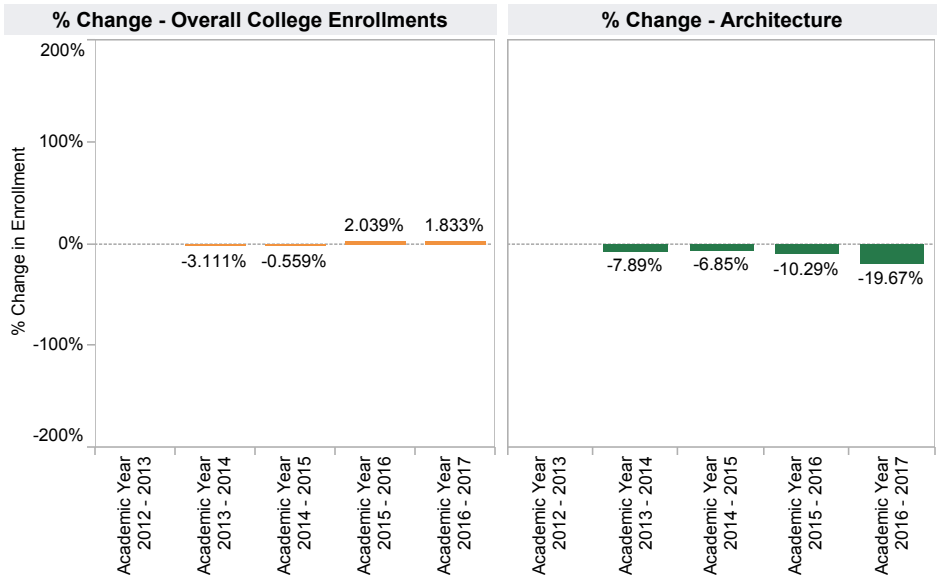
III. PROGRAM DATA ANALYSIS AND PROGRAM-SPECIFIC MEASUREMENTS

A. ENROLLMENT

SLOCCCD Program Review Data - Enrollment

Department:	Course:	Dual Enrollment:	Prison:
Architecture	All	All	All

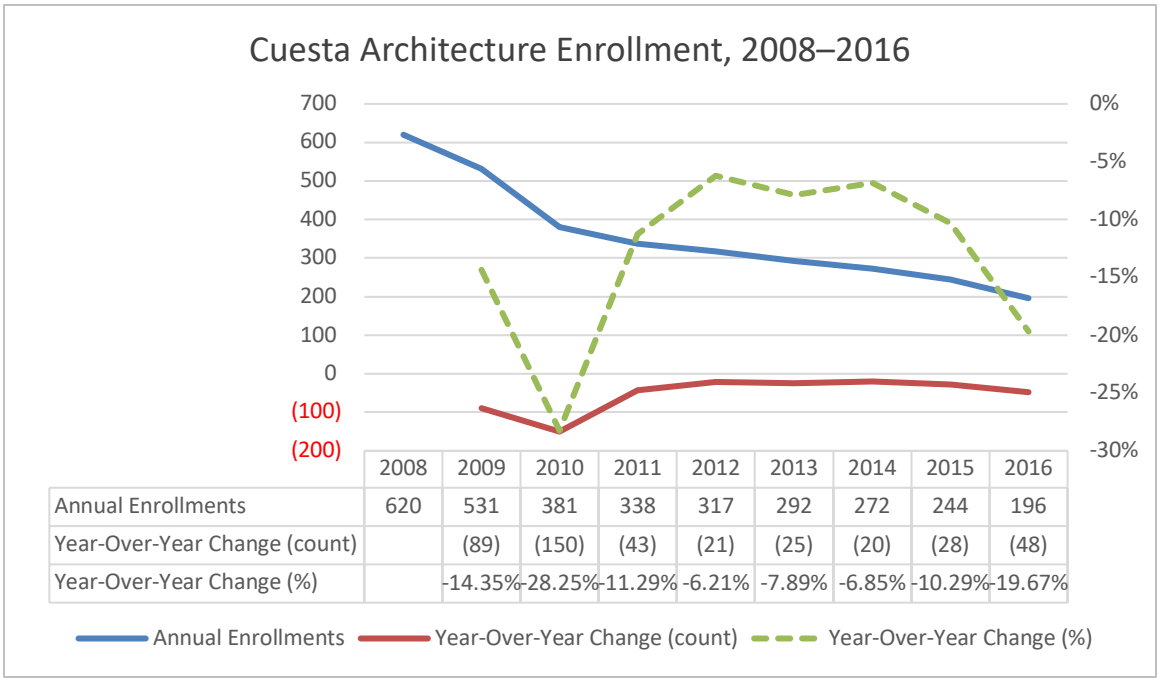




Enrollment: Duplicated count of students who completed greater than 0 units in positive attendance courses or were present on census for all other accounting methods.

Overall College enrollments for on-campus and distance education programs have been declining through 2016–17, a trend that apparently continues for 2017–18. The areas of modest growth in enrollment registered for 2015–17 have come solely from nontraditional settings: dual enrollment and the CMC prison. The Architecture Department does not offer courses in those venues.

That said, the architecture program enrollments have continued to decline more steeply than the College overall. Another significant drop in 2016–17 is especially concerning. Referring to Figure 1, on page 3, it is interesting to note that freshman and transfer enrollments at Cal Poly CAED overall and, in particular, its architecture department showed a similarly sharp decline for 2016, the last year for which published data is available. The question is, why?



	2008	2009	2010	2011	2012	2013	2014	2015	2016
Annual Enrollments	620	531	381	338	317	292	272	244	196
Year-Over-Year Change (count)		(89)	(150)	(43)	(21)	(25)	(20)	(28)	(48)
Year-Over-Year Change (%)		-14.35%	-28.25%	-11.29%	-6.21%	-7.89%	-6.85%	-10.29%	-19.67%

There is one dynamic that may be obscured by a metric that focuses solely on a program's duplicated enrollments in a given year: students who float in and out of the program as they take more time to complete general education (GE) requirements, address personal economic and developmental issues, and so on. We do not know if this is a significant factor, and we do not have access to data that would ascertain this; it may or may not be an issue. It is also possible that reductions in the number of sections or courses offered at Cuesta could play a role in this, as the College seeks to maximize efficiency at the expense of access.

In any case, declining enrollments in undergraduate architecture programs have been a topic of much discussion nationwide. While some local factors, such as steeply rising housing costs, exacerbate the problems facing our program, the enrollment crisis is not unique to Cuesta.

A robust national discussion has been taking place about the sharp drop in the number of young people interested in pursuing careers in architecture, approximately 10 percent over the last five years.[1] An article recently published in *Architect* magazine, a trade journal, suggests that other majors with shorter pathways to job readiness are seen as more attractive. The piece goes on to list some additional factors: "students' lack of knowledge of architecture, the long and expensive road to becoming an architect, and recent changes to U.S. public schools' curricula."[2] Part of the challenge is figuring out how to make the profession more inclusive, reaching out to women, minorities, and families with limited incomes.

[1] Mimi Kirk, "Why Architecture," *Architect*, February 2018, 57.
[2] Ibid.

A major effort to streamline the process of becoming a licensed architect is the Integrated Path to Architectural Licensure (IPAL), which is the product of a collaboration between NCARB (National Council of Architectural Registration Boards) and ACSA (Association of Collegiate Schools of Architecture). Currently being piloted at 21 colleges and universities, the aim of IPAL is to make students eligible for professional licensure upon graduation from a participating B.Arch. or M.Arch. program. (Cuesta's Architecture program is articulated with two of the schools piloting IPAL: Woodbury University and NewSchool.)

The article cited above goes on to suggest that recent STEM initiatives in K–12 education privilege science, math, and engineering at the expense of the arts and humanities. As ACSA executive director Michael Monti puts it, "Architecture is a 'between' discipline. It's a great synthesizer of science and technology, art, and the humanities."[3] Without taking anything away from science and technology, the challenge is to reinsert the arts into primary and secondary school curricula and give students project-based opportunities to merge these areas, what one initiative cited in this article calls "STEM to STEAM."[4]

Where does a community college architecture program such as Cuesta's fit into this picture? We provide a rigorous, university-quality foundational program that helps make architectural education affordable to many who would otherwise be shut out of the field. In addition to serving this function for our local students, Cuesta's architecture program has operated as a magnet program for students from other areas of the state, including individuals who began their studies at other community colleges, only to realize their local institution wasn't going to get them where they wanted to go. Moreover, long before guided pathways became a top priority in our community college system, the architecture program has been offering a quintessential guided pathway that can ultimately lead to full membership in the profession, not merely to a lower-level technical role.

The challenges of increasing enrollment and attracting more young people to careers in architecture are problems that will not likely be solved overnight. Were the field merely a quaint relic of a bygone era, then we might well ask why a program that isn't "trending" just now should be continued at all. But this is assuredly not the case with architecture. The profession remains an essential component of any modern society, especially one that will be grappling with population growth, rehabilitation and replacement of an aging building stock and infrastructure, and the myriad problems of climate change. Risking hyperbole, we might even mention the role architects will inevitably be called upon to play in the wake of the major disasters Californian's are constantly warned to expect. In the long run, then, the architectural profession will remain not only viable but also necessary. With this necessity comes the imperative for our public institutions at all levels to support it.

Still, we need more students.

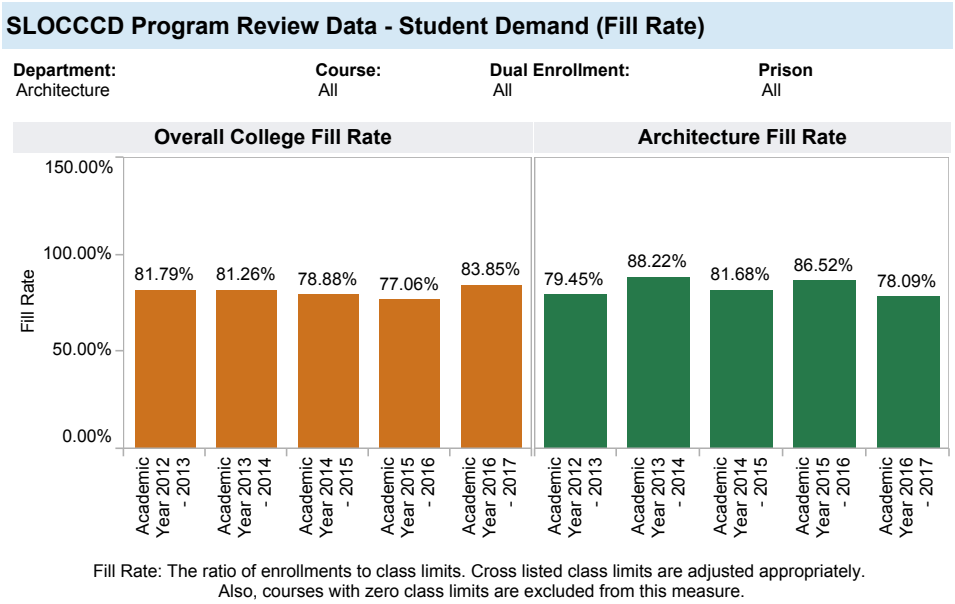
In the quest to boost enrollments, effective marketing and outreach can make a difference. Architecture faculty visit local high schools annually as part of this outreach, but that alone does not suffice; the College itself needs to do more, both within and beyond our county.

[3] Ibid.
[4] Ibid.

Only recently has the College even mentioned at all the existence of our program in any of its marketing campaigns. We have certainly appreciated the two billboards and fleeting appearances in some television ads, but more sustained and durable efforts are required.

A static Web presence is one way to reach prospective students within and, importantly, beyond our immediate area. In fact, the architecture program developed and operated such a website from 2009 until August 2017, when the College forced us to abandon it. In addition to providing useful information in a highly professional way, our website had an online contact form that relayed inquiries directly to the architecture faculty, who would then communicate directly with the prospect. Of the prospective students who reached out to us via this form, 33 percent ended up enrolling in our program. We have no way to track how many others may have viewed our site and simply enrolled without initiating a contact beforehand. What we do know is that we have lost one of our most effective marketing tools, and the College has done nothing to replace it. We would willingly work with the marketing department to find an appropriate way to integrate the information and direct contact capability we used to have into the College's official website.

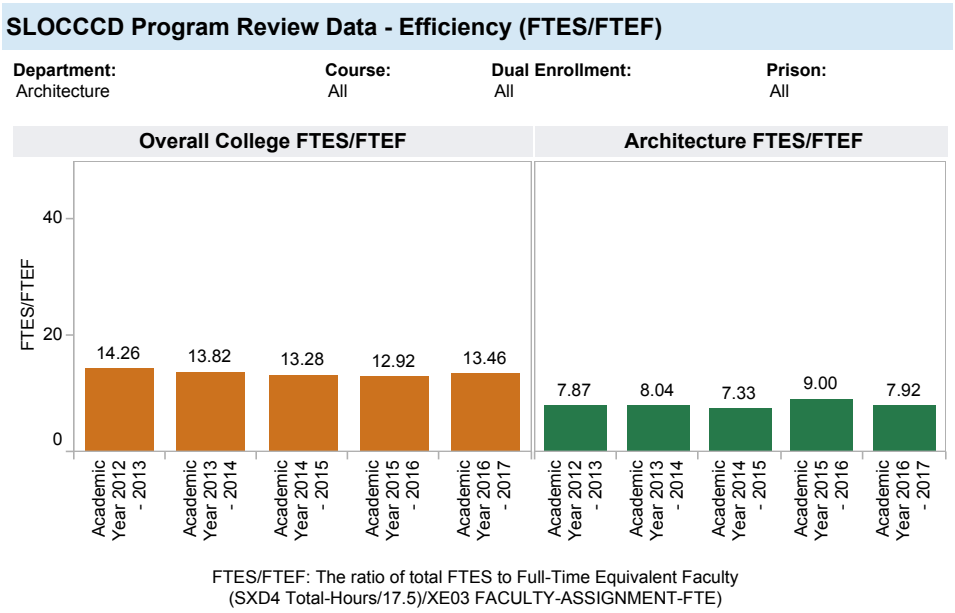
B. STUDENT DEMAND



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.

Over the past five years, the architecture program's fill rates have compared favorably with those for the College overall. Although our fill rate for 2016–17 fell while the College's rate rose, it must be noted that architecture's fill rates exceeded the College's by a significant margin for three of the last five years.

C. EFFICIENCY



Cuesta's architecture program has always lagged the College in efficiency. Much of this problem, shared by university-level architecture programs nationwide, is due to the inherent nature of this discipline's distinctive studio/lab teaching modality, which revolves around a high degree of individualized classroom critique and student presentation for most courses.

With respect to efficiency, the Achilles heal of the architecture program has been its lack of any large lecture courses that would offset the inefficiencies of the core studio/lab subjects. To this end, we are in the process of developing an architectural history sequence that could be offered in an appropriately large lecture format, or even online. The intent would be that such courses would not only be transferable for architecture majors but also count as general education (GE) in lieu of, say, art history. We hope to have this in place for the 2019–20 year, if not sooner.

If there is one cautionary note for this GE scenario, it would be that we run the risk of improving our program's metrics at the expense of other existing College programs, essentially reshuffling the proverbial card deck without necessarily adding new cards. This is where a distance-ed option may be appealing.

D. STUDENT SUCCESS: COURSE COMPLETION BY MODALITY

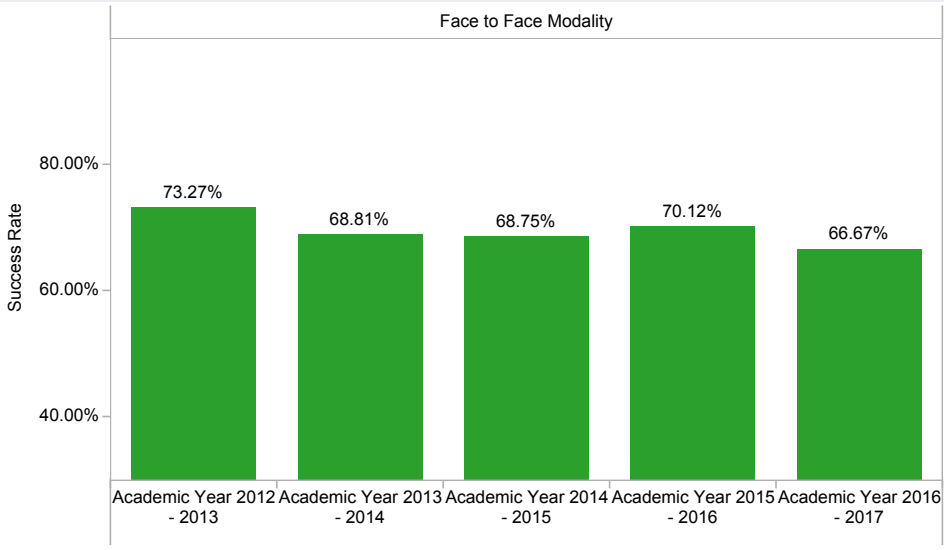
SLOCCCD Program Review Data: Successful Course Completion

Select Department: Architecture

Course: Multiple values

Legend: Face to Face Modality

Successful Course Competion by Modality -Architecture



Successful Course Competion by Modality Table - Architecture

		Academic Year 2012 - 2013	Academic Year 2013 - 2014	Academic Year 2014 - 2015	Academic Year 2015 - 2016	Academic Year 2016 - 2017
Face to Face Modality	Department Success Rate	73.27%	68.81%	68.75%	70.12%	66.67%
	Total Department Enrollments	318.0	295.0	272.0	241.0	192.0

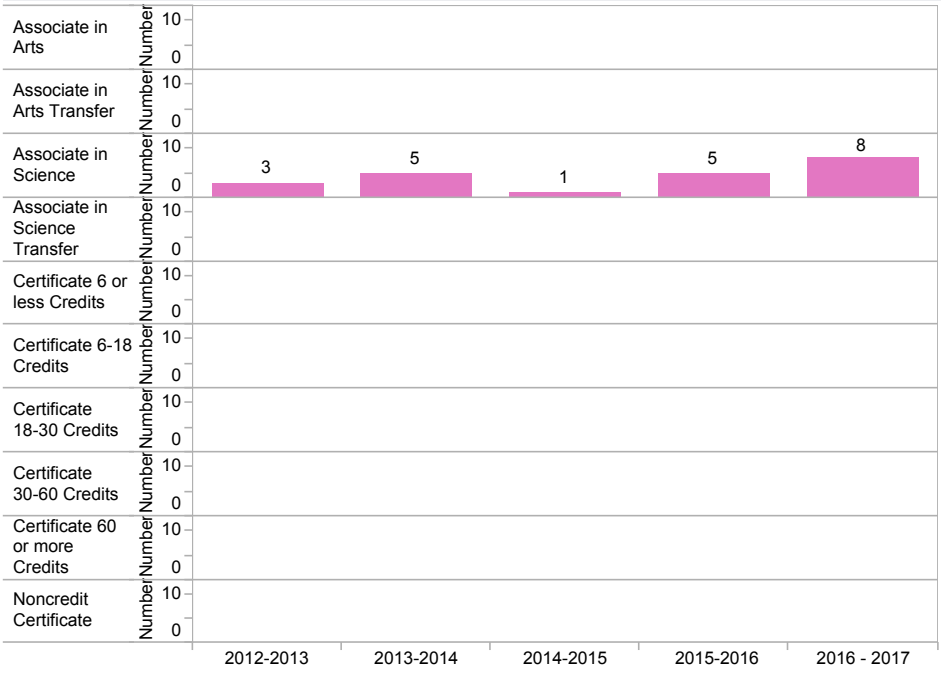
All courses in the architecture program are taught in the face-to-face modality. Please refer to the comments under “General Student Success” on the page 14.

E. DEGREES AND CERTIFICATES AWARDED

SLOCCCD Program Review Data: Degrees and Certificates Awarded

Program: Architecture & Architec. Tech

Award Type: All



Program Awards Table

Award Type	Award	2012-2013	2013-2014	2014-2015	2015-2016	2016 - 2017
Associate in Science	Architectural Technology (AS)	3	5	1	5	8
	Total	3	5	1	5	8
Grand Total		3	5	1	5	8

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

Data regarding university transfers is not included in the SLOCCCD Program Review Data; and Cal Poly, our primary receiving institution, does not share disaggregated transfer data. We do know, however, that transfer rates from our program to Cal Poly have remained very strong, routinely constituting over 50% of Cal Poly architecture transfer admissions in nearly any given year. In recent years, a substantial majority of our qualified second-year students who applied to Cal Poly were thus admitted. Small numbers of our students transfer to other B.Arch. programs, including NewSchool of Architecture and Design and Woodbury University.

In recent years, program faculty have been proactively encouraging students to apply for the degree, and these efforts seem to be helping. The number of degrees our students were awarded jumped dramatically to eight for 2016–17, up from five the previous year. Nevertheless, many show little interest in receiving the degree; 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.

F. GENERAL STUDENT SUCCESS – COURSE COMPLETION

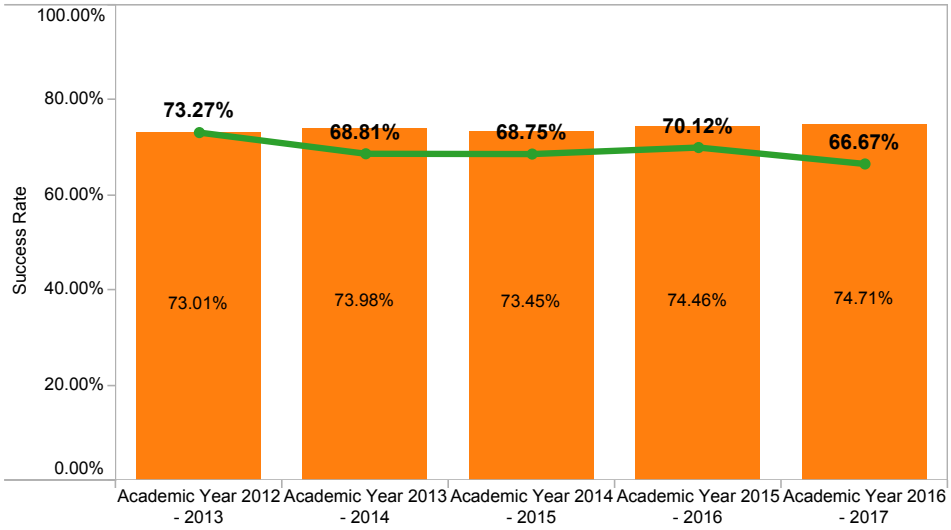
SLOCCCD Program Review Data: Successful Course Completion

Select Department: Architecture

COURSE All

Legend:
Department Success Rate
Overall College Success Rate

Successful Course Completion - Architecture

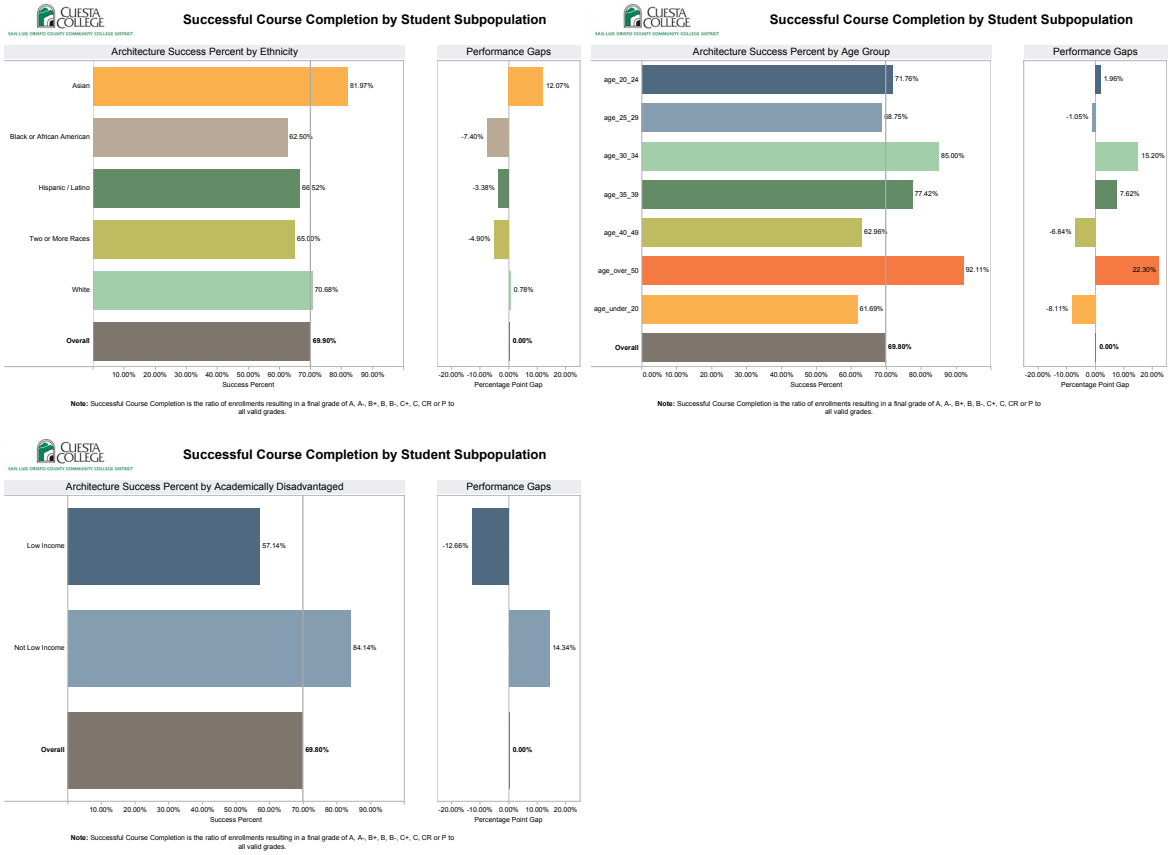


Architecture Success Rate Table

	Academic Year 2012 - 2013	Academic Year 2013 - 2014	Academic Year 2014 - 2015	Academic Year 2015 - 2016	Academic Year 2016 - 2017
Department Success..	73.27%	68.81%	68.75%	70.12%	66.67%
Total Enrollments	318	295	272	241	192

Architecture's rate of successful course completion tracks pretty well with, though slightly below, 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.

G. DISAGGREGATED STUDENT SUCCESS (FIVE-YEAR AVERAGES)



When considering disaggregated student success data, looking at five-year averages presents a more accurate picture than examining any individual academic year, as the demographics makeup of a class can vary considerably from year to year. Although it would be far more useful to consider weighted averages, such data is presently unavailable.

Although success rates do vary by ethnicity, the data cluster fairly tightly, with Hispanic/Latino students trailing whites by several percentage points. Although Asian students surpass all other groups by a significant margin, and blacks or African-Americans lag behind, these two groups comprise relatively small populations within our program; consequently, any individual's success or failure has a disproportionate effect on a metric that uses percentages. This is why we really should be looking at weighted averages instead.

The same comment would apply for age groups, though not to the extent as for ethnicity. The architecture program has had a handful of students older than 50, for example, and most have performed quite well, but they are outliers. Some are retirees who are financially secure and use their maturity and career experience to good advantage. For students between 40 and 50, the picture is more complicated.

Our youngest students, those under 20, have the lowest success rates. The reasons vary, but often they come down to immaturity and academic deficiencies that require remediation. Financial security may also be a factor.

An individual's economic circumstances also affects success. We have noted for years that larger numbers of our students seem to be working longer hours at low-wage jobs to make ends meet, and this diverts their time and energy away from their studies. Accordingly, the success rate for students classified as low-income is signicantly lower than for those who do not fall into that category. Where appropriate, we counsel such students to either reduce their course load or spend fewer hours on the job—sometimes what seems like the slower route turns out to be the faster way to achieve their goal.

- Other Relevant Program Data (optional)

  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.

IV. CURRICULUM REVIEW

A. List all courses and degrees/certificates that have been created, modified, or deactivated (and approved by the Curriculum Committee) since the last CPPR.

CURRICULUM REVIEW GUIDE and WORKSHEET
Courses and Programs

Current Review: Date 3/5/2018

Reviewer: David Fernandez

1. Courses

- List all courses, which were active in your program at the time of the last CPPR.
- Review the current CurricUNET Course Outline of Record (COR) for each course and indicate yes/no for each column below.
- For each new, modified, and deactivated course provide the effective term posted on CurricUNET.

Course (Prefix / Number)	Currently active	New course since last CPPR	Major modification since last CPPR	Minor modification since last CPPR	Deactivated since last CPPR Notified impacted program(s)*
Arch 180	yes	yes	no	no	no
Arch 201	yes	no	Yes	no	no
Arch 205	yes	no	no	no	no
Arch 221	yes	no	no	no	no
Arch 222	yes	no	no	no	no
Arch 232	yes	no	no	no	no
Arch 242	yes	no	no	no	no
Arch 244	yes	no	no	no	no
Arch 245	no	no	no	no	no
Arch 246	no	no	no	no	no
Arch 248	no	no	no	no	no
Arch 251	yes	no	no	no	no
Arch 252	yes	no	no	no	no

*Note: Please state if the deactivated course impacted any other program(s) and if and when the affected program(s) was/were notified:

Deactivated Course	Impacted Program (s)	Date affected program was notified

2. Course Review

- Please review the current CurricUNET CORs for all active courses in your program for currency and accuracy and annotate the items below.
- If you find any mistakes in the CORs (e.g. non-content related items such as typos), contact the Curriculum Chair or Curriculum Specialist for correction.
- All other changes require either a minor or major modification. Your curriculum representative will assist you.
- Some modifications need to be processed in the current term (see annotations # 2 and #3 below).
- Some modifications can be done over the period of the next five years (see annotation #1 below).

Course Number	180	201	205	221	222	232	242	244	245	246	248	251	252
1. Effective term listed on COR	S`16	S`18	F`03	S`05	F`03	S`06	S`06	F`03	F`16	F`11	F`11	F`03	
2. Catalog / schedule description is appropriate	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3. Pre-/ co-requisites / advisories (if applicable) are appropriate	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4. "Approved as Distance Education" is accurate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5. Grading Method is accurate	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Repeatability is zero	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7. Class Size is accurate	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8. Objectives are aligned with methods of evaluation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9. Topics / scope are aligned with objectives	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	No	No
10. Assignments are aligned with objectives	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

11. Methods of evaluation are appropriate	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12. Texts, readings, materials are dated within last 5 years	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13. CSU / IGETC transfer & AA GE information (if applicable) is correct	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14. Degree / Certificate information (if applicable) is correct		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15. Library materials are adequate and current *		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*Indicate on the Five-Year Cycle Calendar below when a minor or major modification will be submitted.

[1] If no, a major modification is needed within the next 5 years (see five-year cycle calendar).
[2] If no, a major modification is needed in the current term. (For increase in class size, see your curriculum representative for details.)
[3] If no, a minor modification is needed in the current term.
[4] If no, contact the Curriculum Chair or Curriculum Specialist.

3. Programs

- List all programs/certificates that were active at the time of the last CPPR.
- Review the CurricUNET "Program of Study" outline and indicate yes/no for each program/certificate.
- For each deactivated program provide the effective term posted on CurricUNET.

Program / Certificate Title	Currently active	New program since last CPPR	Program modification since last CPPR	Deactivated since last CPPR
A.S	Yes	No	No	No
C.P.	**No**	No	No	Yes

4. Program Review

- Review the CurricUNET "Program of Study" outline for each active program/certificate and indicate yes/no for each column below.

Currently active Program / Certificate: Title	Required courses and electives, incl. course numbers, course titles, and course credits, are accurate	Program description is current	Program Learning Outcomes are accurate and include method of assessment
A.S.	Yes	Yes	Yes

* If not, program modification is needed.

** If not, Program Learning Outcomes modification is needed.

5. Five-Year Cycle Calendar

- During the following five-year cycle all aspects of the course outline of record and program curriculum will be reviewed for currency, quality, and appropriate CurricUNET format.
- Indicate if a course needs a major or minor modification based on the current course review. Your curriculum representative will assist you.
- When submitting a major or minor modification, please enter or update the Student Learning Outcomes for each course.

COURSES

Course Number	F `17	S `18	F `18	S `19	F `19	S `20	F `20	S `21	F `21	S `22
Arch 201		UTD								
Arch 205		Major								
Arch 221			Major							
Arch 222			Major							
Arch 232			Major							
Arch 242				Major						
Arch 244				Major						
Arch 245					UTD					
Arch 246					UTD					
Arch 248					UTD					
Arch 251					Major					
Arch 252						Major				

PROGRAMS / CERTIFICATES

Program/Certificate Title	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
		modify	modify	modify	modify	modify	modify	modify	modify	modify
		modify	modify	modify	modify	modify	modify	modify	modify	modify
		modify	modify	modify	modify	modify	modify	modify	modify	modify
		modify	modify	modify	modify	modify	modify	modify	modify	modify

*UTD indicates Up to Date

cm revised 11/08/16

V. PROGRAM OUTCOMES, ASSESSMENT AND IMPROVEMENTS

A. Attach or insert the assessment calendar for your program for the next program review cycle.

Program Assessment Cycle Calendar ARCHITECTURE

CYCLE STAGE	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020
SLO Assessment	Arch 205 Arch 221 Arch 232 Arch 242 Arch 251	Arch 201 Arch 222 ~~*Arch 230~~ Arch 244 ~~*Arch 245~~ ~~*Arch 246~~ Arch 252	~~*Arch 248~~	*Arch 180*					
Analyze Results & Plan Improvements			Arch 201 Arch 205 Arch 221 Arch 232 Arch 242 Arch 251	Arch 222 Arch 230 Arch 244 Arch 252					
Plan Implementation					Arch 201 Arch 205 Arch 221 Arch 232 Arch 242 Arch 251	Arch 222 Arch 230 Arch 244 Arch 252			
Post-Implementation SLO Assessment							Arch 201 Arch 205 Arch 221 Arch 232 Arch 242 Arch 251	Arch 222 Arch 230 Arch 244 Arch 252	

*Indicates the course was cancelled or not offered that semester

B. Have you completed all course assessments in eLumen? If no, explain why you were unable to do so during this program review cycle and what plan(s) exist for completing this in the next program review cycle.

With the exception of our LEED courses, Arch 245, 246 and 248, which have not been offered during this CPPR cycle, all scheduled course assessments are complete.

C. Include the most recent "PLO Summary Map by Course" from eLumen which shows the Course-level SLOs mapped to the Program-level SLOs.

AS_ARCH_TECH Courses AS_ARCH_TECH ☑ Include inactive Courses	Advance/articulate completed course work towards university transfer into 4 or 5 year Architecture programs or related majors	Apply fundamental principles of architectural design theory and practice	Apply the principles of design communication as they apply to architectural project delivery.
ARCH201 - Intro Arch/Envir Design			
Define some of the fundamental ways buildings might be understood as "architecture"	✓	✓	
Employ a critical framework for analyzing and evaluating buildings as works of architecture.	✓	✓	✓
Describe the nature of professional life in different types of architecture firms.	✓		✓
Recognize the dynamics of the current market for architectural services.	✓		✓
Identify and analyze the relationship between architects and the greater society in which they operate.	✓		
Explain how the various environmental design professions relate to each other.	✓	✓	
Define "sustainable society" and discuss how the environmental design professions can address this issue.	✓	✓	
ARCH221 - Design & Visual Commun I			
Construct proportionally accurate scale models of existing and imagined objects and environments.		✓	
Using various "analog" drawing media (i.e. pencils, pens, markers), drafting tools (i.e. triangles, scales, T-square or parallel…	✓		✓
Construct, BY HAND, proportionally accurate one- and two-point lineal perspectives of existing and imagined objects and…	✓		✓
Create a range of implicitly and explicitly defined shapes, spaces and forms.	✓	✓	
Employ the basic design concepts of size, shape, surface, material, context, number, variety and relationship (pattern, rhythm,…	✓		
Generate diverse alternatives and develop final solutions to defined two- and three-dimensional design problems.	✓		✓

AS_ARCH_TECH Courses AS_ARCH_TECH ☐ Include inactive Courses	Advance/articulate completed course work towards university transfer into 4 or 5 year Architecture programs or related majors	Apply fundamental principles of architectural design theory and practice	Apply the principles of design communication as they apply to architectural project delivery.
ARCH222 - Design & Visual Commun II			
Employ with greater effectiveness and subtlety the principles, concepts, methods, and skills introduced and developed in Arch…	✔	✔	
Employ a variety of graphic techniques (i.e. bubble diagram, area diagram, matrix, network) to visually represent quantitative…	✔	✔	
Employ drawing systems and conventions (orthographic, plan oblique, and lineal perspective) to communicate design intentions and…	✔		
Use words and drawings to systematically gather, represent, refine, and present a range of information from natural and/or…	✔		✔
ARCH232 - Arch Computer Graphics			
Use computer hardware and software configurations to visually communicate building design information.	✔	✔	✔
Employ digital file cataloging and storage procedures.			✔
Employ computer aid drafting and building information modeling tools to create digital presentations.	✔	✔	✔
Create digital 3-D models using realistic applications of construction materials.	✔	✔	✔

AS_ARCH_TECH Courses AS_ARCH_TECH ☐ Include inactive Courses	Advance/articulate completed course work towards university transfer into 4 or 5 year Architecture programs or related majors	Apply fundamental principles of architectural design theory and practice	Apply the principles of design communication as they apply to architectural project delivery.
ARCH242 - Intro Arch Practice			
Use and represent three-dimensional buildings, and their components, as two-dimensional orthographic images.	✔	✔	✔
Employ architectural drawing conventions and standards to coordinate a set of construction drawings.	✔	✔	
Create common light wood framing and finish construction details.	✔	✔	✔
Apply the principles of site planning and site grading.			
ARCH244 - ARCH Environ System			
Effectively research and identify site specific micro climate data.	✔	✔	
Use relevant climate data to complete bioclimatic analysis and implement appropriate passive building strategies.	✔	✔	
Evaluate thermal comfort and lighting strategies for effectiveness and make appropriate modifications.	✔	✔	

AS_ARCH_TECH Courses AS_ARCH_TECH ☐ Include inactive Courses	Advance/articulate completed course work towards university transfer into 4 or 5 year Architecture programs or related majors	Apply fundamental principles of architectural design theory and practice	Apply the principles of design communication as they apply to architectural project delivery.
ARCH251 - Arch Design Fund I			
Apply principles and elements of composition in two- and three- dimensional designs and presentations.	✔	✔	✔
Manipulate architectural elements to define forms and spaces.	✔	✔	✔
Manipulate architectural elements in response to functional issues and constraints.	✔	✔	
Define in words and diagrams the central concept, or "parti," of a design.	✔	✔	
Recognize and identify the principles and elements of composition operating in the built environment.	✔	✔	
ARCH252 - Arch Design Fund II			
Apply principles and elements of composition in two- and three-dimensional designs and presentations.	✔	✔	✔
Manipulate architectural elements to define forms and spaces.	✔	✔	
Manipulate architectural elements in response to functional issues and constraints.	✔	✔	✔
Define in words and diagrams the central concept, or "parti," of a design.	✔	✔	✔
Recognize and identify the principles and elements of composition operating in the built environment.	✔	✔	

D. Highlight changes made at the course or program level that have resulted from SLO assessment.

Architecture continues to make ongoing refinements to lectures and assignments based on SLO assesemets, advisory committee feed back and daily observation of student perfomance.

E. Identify and describe any budget or funding requests that are related to student learning outcome assessment results. If applicable, be sure to include requests in the Resource Plan Worksheet.

For the year 2018-19 Architecture is forecasting the following recourses outlined in our 2018 Resource Plan Worksheet.

- Upgrade drafting tables and chairs in 4115.
- Fund new digital fabrication lab (CNC Laser Cutters and 3d printers)
- Replace data projectors and instructor stations in 4115 and 4116.
- Fund software purchases and upgrades.
- Fund new faculty office computer.
- 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
- Ongoing funding for outside hosting of Cuesta's architecture program website.

VI. PROGRAM DEVELOPMENT

Indicate how the program supports efforts to achieve any of the following:

A. Institutional Goals and Objectives
B. Institutional Learning Outcomes
C. Program outcomes

The core of the architecture program remains in place. With our full two-year articulation with Cal Poly, the number-two-ranked undergraduate architecture school in the nation for 2017–18, Cuesta retains a privileged position among California community college architecture programs. The success rate for Cuesta architecture students transferring to Cal Poly and other universities remains very high, and nearly all who complete our sequence continue to be accepted as third-year students.

Indicate any anticipated changes in the following areas:

A. Curriculum and scheduling
B. Support services to promote success, persistence and retention
C. Facilities needs
D. Staffing needs/projections

Lastly, address any changes in strategy in response to the predicted budget and FTES target for the next program review cycle.

The architecture program is in the process of developing a large lecture course sequence in architectural history that can operate at an efficiency that would offset the inefficiencies inherent in our core studio/lab teaching modality. We are even considering offering this as distance ed.

VII. END NOTES

If applicable, you may attach additional documents or information, such as awards, grants, letters, samples, lists of students working in the field, etc.

VIII. After completing and submitting this document, please complete the Overall Program Strength and Ongoing Viability Assessment with your Dean before May 15, 2018.

SIGNATURE PAGE

Faculty, Director(s), Manager(s), and/or Staff Associated with the Program

Instructional Programs: All full-time faculty in the program must sign this form. If needed, provide an extra signature line for each additional full-time faculty member in the program. If there is no full-time faculty associated with the program, then the part-time faculty in the program should sign. If applicable, please indicate lead faculty member for program after printing his/her name.

Student Services and Administrative Services Programs: All full-time director(s), managers, faculty and/or classified staff in the program must sign this form. (More signature lines may be added as needed.)

Division Chair/Director Name	Signature	Date
BRUCE SILVERBERG	Bruce A Silverberg	03/06/2018
Name	Signature	Date
DAVID FERNANDEZ	D f -	3/6/2018
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date

SUPPLEMENTAL DOCUMENTS

FACULTY HIRING PRIORITIZATION INFORMATION (IF APPLICABLE)

If your program requested a faculty position for consideration, please attach or embed the following worksheets that were presented to the College Council. The guidelines for faculty prioritization can be found here: https://cuestacollege.sharepoint.com/Committees/College%20Council/Committee%20Documents/REVISED_Prioritization_Process_Handbook_9_2016.pdf#search=faculty%20prioritization%20handbook

APPLICABLE SIGNATURES:

Vice President/Dean	**Date**
Division Chair/Director/Designee	**Date**
Other (when applicable)	**Date**

The above-signed individuals have read and discussed this review. The Director/Coordinator, Faculty, and staff in the program involved in the preparation of the CPPR acknowledge the receipt of a copy of the Vice President/ Dean's narrative analysis. The signatures do not necessarily signify agreement.